

RSA



Road Safety Strategy 2013 — 2020

Report of Mid-Term Evaluation

An tÚdarás Um Shábháilteacht ar Bhóithre
Road Safety Authority

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1.

Executive Summary

The evaluation of the government's *Road Safety Strategy 2013–2020* is provided for under Action 112 of the strategy which requires that the Road Safety Authority (RSA) 'conduct a mid-term evaluation of the *Road Safety Strategy 2013–2020* in 2016, incorporating a review of the strategy targets and actions.'

The purpose of conducting an evaluation of the strategy at the mid-point of its term is to assess Ireland's performance in delivering on the 144 strategy actions across education, enforcement, engineering and evaluation set out in the strategy, and ultimately to measure Ireland's performance relative to the targets on fatalities (reduce to 124 or fewer by 2020) and serious injuries (reduce to 330 or fewer by 2020).

The mid-term evaluation, led by the RSA, was conducted in quarter four 2016 and included significant engagement from all strategy stakeholders. The purpose of this report is to set out the key findings of the evaluation so as to inform the programme of work to be undertaken by all stakeholders by 2020, the end of the strategy period.

Context

In 2016, there was widespread concern that despite the fact that 2015 was the safest year on record, the longer term trend from 2012¹ to 2016 showed a deterioration in Ireland's road safety performance. There were 188² people killed on our roads at the end of 2016, an increase of 15% on 2012. The deterioration in Ireland's road safety performance since 2013 is set against a backdrop of significant progress in reducing the trauma on our roads over the duration of the previous strategy.

The current government's *Road Safety Strategy* highlighted the need to bring greater focus on serious injuries. Despite this the number of people seriously injured on our roads increased from 472 in 2011³ to 632⁴ in 2016.

This context has made the mid-term evaluation all the more critical, and it is imperative to take stock, review performance and refine the approach to halt this regression.

The Approach to the Evaluation

The evaluation incorporates two core elements:

- ▶ A retrospective analysis looking back over Ireland's performance from 1 January 2013 to 31 December 2016 in achieving the targets and actions set out in the government's *Road Safety Strategy 2013–2020*.
- ▶ A prospective analysis, looking forward to what action needs to be taken by 2020 to meet Ireland's targets on fatalities and serious injuries, thus enabling Ireland to close the gap on countries with a better road safety record than Ireland.

Methodology

All stakeholders were invited to a full day workshop, hosted by the RSA in Dublin Castle on 14 November 2016, to formally review Ireland's progress. The Minister for Transport, Tourism and Sport also participated at the workshop.

The workshop incorporated a review of Ireland's road safety performance in terms of fatalities and injuries, and a review of the 144 actions in the government's Road Safety Strategy Action Plan. In particular, stakeholders identified the specific challenges associated with the actions which are behind schedule.

Furthermore, brainstorming sessions were held, where stakeholders identified new priorities and emerging areas of concern across six key themes: education, enforcement, engineering, new technology, killer behaviours and data sharing. Following the

workshop, the RSA engaged in the process of synthesising the information gathered on the day, and identified 22 new actions to be implemented by the end of 2020.

Retrospective Analysis: Outcomes

Following the analysis of Ireland's performance from 1 January 2013 to 31 December 2016, together with the analysis of the stakeholder submissions and feedback from the workshop, a number of important outcomes emerged. The critical point, on which there was unequivocal consensus, and which set the tone for the workshop, is that the recent increase in road deaths is absolutely unacceptable and must be addressed collectively by all stakeholders.

There was agreement among all stakeholders that there was a need to renew the commitment to meeting the existing target of 124 fatalities or fewer by 2020. Therefore a 10% year-on-year decline in deaths from the end of 2016 to 2020 must be achieved. The collective efforts across all areas of intervention, education, engineering, enforcement and evaluation, must be pooled to achieve this.

All agreed that a 'back to basics' approach, in terms of targeting **killer behaviours**, must be adopted. A pragmatic approach must be taken in light of the following factors:

- ▶ reduced human and financial resources across many stakeholder organisations
- ▶ increased economic activity and more vehicles on the road, which increases the level of risk exposure

The focus must be on the main killer behaviours, i.e. the behaviours that have been proven to contribute to fatal collisions on our roads in recent years. Reducing the number of collisions and casualties caused by these killer behaviours is the single most important means for Ireland to achieve the target on fatalities by 2020. Interventions to address these killer behaviours must be further developed and enhanced, in particular targeted visible enforcement and harsher penalties for non-compliance.

There was universal agreement that resources must be found to equip:

- ▶ An Garda Síochána to provide the necessary level of targeted and visible enforcement to reduce the incidence of speeding, drink-driving, non-seat belt wearing and mobile phone use while driving
- ▶ Transport Infrastructure Ireland (TII) to maintain and renew the existing roads network.

1 2012 fatality figures are used as the baseline in setting targets for fatalities.

2 Provisional figure.

3 2011 serious injury figures are used as the baseline in setting targets for serious injuries.

4 Provisional figure, as at Q1 2017. Subject to change.

The evaluation identified 22 new actions to be implemented by 2020. Of these, the **12 key actions** in Table 1 are considered to have the most life-saving potential and must be resourced and implemented as a priority.

Table 1 Frontline/direct impact actions

1	Increase garda numbers in Road Policing Unit, now at 681 members, by 10% year on year up to 2020 (749 in 2017, 824 in 2018, 906 in 2019 and 997 in 2020) or further should targets in road safety not be achieved. The targeted deployment of these resources is to be informed by research
2	Replace the current administrative sanction (penalty points) with a disqualification from driving for drivers detected with a presence of alcohol between 50 mgs and 80 mgs of alcohol/100 ml of blood or equivalent levels from urine or breath
3	Recommend that penalties for the following offences be increased: speeding, mobile phone use, non-wearing of seat belts, carrying unrestrained children in a vehicle
4	Extend the powers of An Garda Síochána to detain, remove, store, and subsequently release or dispose of vehicles, as provided for under section 41 of the Road Traffic Act 1994, to include vehicles in use in a public place where the person driving is a learner driver who is unaccompanied by a duly qualified driver
5	Extend fixed charge notice system in respect of road transport offences
6	Conduct an analysis of existing collision data to identify the profile of fatal and serious injury collisions occurring during off-peak travel times (i.e. 10pm to 5am) to inform education / enforcement strategies
7	Refine the driver theory test and existing road safety education resources commencing with the junior cycle programme to incorporate new learning methodologies and technologies
8	Develop a business case to support the inclusion of compulsory road safety education in the curriculum for secondary schools
9	Subject to legal advice, examine the steps necessary for the RSA to publish on its website a list of persons disqualified from driving by the courts
10	Review the feasibility of extending the number of 30-km/h speed limit zones in vulnerable road user (VRU) rich locations (urban city/town centres), in consultation with UK experts on best practice models in place in the UK and internationally
11	Expand funding to TII to cover anticipated costs for national road minor realignment schemes and pavement renewal of existing national road network in line with the targets set out in the government's <i>Road Safety Strategy 2013–2020</i>
12	Recommendations in the 2016 Department of Health capacity report to be fully implemented insofar as they relate to emergency response times

Prospective Analysis: Priorities for 2017–2020

Following the workshop the RSA identified a programme of work that must be implemented by 2020. This can be summarised into three strands:

1.	Ensure all 30 behind schedule actions are implemented by 2020	The first priority is that the 30 behind schedule actions must be progressed as a matter of urgency. The RSA facilitated discussions with stakeholders to identify and remove impediments to completion and to ensure delivery of the actions.
2.	Implement 22 new actions by 2020	<p>Following on from the collation of the expert views of stakeholders in the context of the mid-term evaluation, 22 new actions were identified, of which 12 are priority actions because of their life-saving potential, as outlined earlier.</p> <p>In summary, these include first and foremost the introduction of specific measures to tackle the killer behaviours by increasing targeted and visible enforcement by An Garda Síochána, and by enacting legislation to introduce harsher penalties for road traffic offences.</p> <p>They also include the formalisation of more regular stakeholder meetings to increase collaboration and progress in our work, and the introduction of measures to address the engineering deficits on the road network.</p> <p><i>For the full list of new actions, see Section 5 (page 33).</i></p>
3.	Set a revised target on serious injuries and continue the work to report on serious injuries using a medical definition	The strategy made a provision for Ireland to review the target set for a reduction in serious injuries, in line with the new reporting requirements set out by the European Commission to produce serious injury figures using a medical definition. It is now opportune, in the context of the mid-term evaluation, to engage in a discussion with stakeholders on the setting of a new target. This will incorporate a review of the most recent data available for Ireland, and continued collaboration with the European Commission on the application of the medical definition.

Critical Success Factors

The government's *Road Safety Strategy 2013–2020* identifies a number of critical success factors which remain relevant as identified in the mid-term evaluation. Figure 1 illustrates some of these factors.

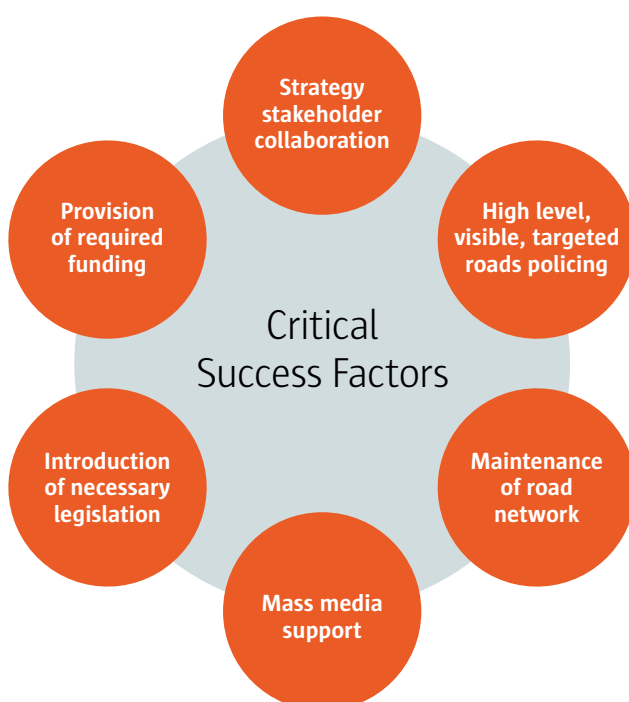


Figure 1 Critical success factors

Conclusion

At this the mid-point in the government's *Road Safety Strategy 2013–2020* we are faced with a stark but very simple choice.

If we reduce fatalities steadily from 2016 to 2020 and achieve the strategy target, there will be 124 or fewer people killed by 2020. While one death is one death too many, this would mean saving 64 lives during the four year period.

If, however, we do not follow this path, we could see further increases in deaths in each year up to 2020. In fact, an incremental increase has been forecast in a study looking at the historic relationship between economic activity and fatalities. Based on the results of this study we could face a worst case scenario of 208 people killed in 2017, 222 people killed in 2018, 231 people killed in 2019, and a devastating 238 people killed in 2020. In summary, this would mean that 317 more people could be killed over the next four years, compared to the 'on target' scenario.

While reaching 124 fatalities or fewer will be challenging, it is imperative to restate our commitment toward this target. This will challenge all strategy stakeholders at this critical halfway point to refocus their individual efforts and responsibilities, as outlined in the existing strategy of 144 actions and the new actions within the mid-term evaluation. Ireland must remain committed to the existing target to have the best chance of closing the gap with the best practice countries and reducing the human and societal costs of road collisions.

2.

Introduction

Section 7 of the Road Safety Authority Act 2006 requires the RSA to prepare and submit to the Minister for Transport, Tourism and Sport a comprehensive programme of measures for the enhancement of road safety and, in particular, for the reduction of fatalities and serious injuries due to road traffic collisions. In accordance with that requirement, the RSA presented the government's *Road Safety Strategy 2013–2020*⁵ to the minister and it was launched in March 2013. It represents the fourth such strategy and the second presented by the RSA. As the agency with statutory responsibility for road safety in the State, the RSA prepared the strategy, and monitors the implementation of its actions.

Action 112 of the government's *Road Safety Strategy 2013–2020* requires the RSA, in consultation with all other stakeholders, to conduct a mid-term evaluation of the government's *Road Safety Strategy 2013–2020* in 2016. This report represents the outcome of the evaluation.

The mid-term evaluation was conducted in quarter four 2016. The review was led by the RSA and included significant engagement from all strategy stakeholders. The purpose of this document is to set out the key findings of the evaluation for the benefit of all stakeholders who are signed up to the government's *Road Safety Strategy 2013–2020* in order to inform the programme of work to be completed by 2020, the end of the strategy period.

The evaluation incorporates two core elements:

- ▶ a retrospective analysis, looking back over Ireland's performance from 1 January 2013 to 31 December 2016 in achieving the targets and actions set out in the government's *Road Safety Strategy 2013–2020*
- ▶ a prospective analysis, looking forward to what action needs to be taken by 2020 to meet Ireland's targets on fatalities and injuries, thus enabling Ireland to close the gap on countries with a better road safety record than Ireland

5 The full rationale for the strategy and its actions is outlined in the document *Road Safety Strategy 2013–2020* and should be read in conjunction with this report.

3.

Methodology

3.1 Consultation Process

The mid-term evaluation included face-to-face consultations with all of the key strategy stakeholders who are responsible for actions in the strategy, and the organisation of a comprehensive workshop to which all interested parties were invited. All of the issues that arose in this process were considered by the RSA when preparing the *Mid-Term Evaluation Report*.

Figure 2 outlines the methodology used in undertaking the mid-term evaluation.



Figure 2 Mid-term evaluation methodology

The RSA undertook and managed a detailed consultation process that can be broken into four distinct phases:

review of progress	bilateral meetings	evaluation workshop	synthesis
(3.1.1)	(3.1.2)	(3.1.3)	(3.1.4)

3.1.1 Review of progress

This phase took place in October 2016 and involved a review of fatalities, serious injuries and contributory factors to collisions. A review of progress on the implementation of the 144 actions in the strategy was also coordinated to establish the current number of those 'completed', 'on schedule' and 'behind schedule'. It is important to highlight that the review of the Action Plan was based on representations made by stakeholders on the progress they made in relation to the actions assigned to them.

3.1.2 Bilateral meetings

In tandem with the progress review above, the second phase involved a series of bilateral, face-to-face consultations, also in October, with all of the eight key strategy stakeholders with responsibility for implementing specified actions contained in the government's *Road Safety Strategy 2013–2020*. The consultation process was explained in full at these meetings, and the expectations for the evaluation workshop, to which all key strategy stakeholders were invited, were discussed in detail.

3.1.3 Evaluation workshop

The RSA led a workshop in November 2016, to which all key strategy stakeholders with lead responsibility for actions were invited to report on the progress of the implementation of those actions. This forum made provision for achievements to be highlighted, as well as affording stakeholders the opportunity to

identify challenges to implementation that had arisen in relation to the behind schedule actions. In addition, the key strategy stakeholders were asked to highlight issues emerging since the launch of the strategy and priorities for the remaining four years.

The RSA was also eager to obtain more detailed views from stakeholders on possible approaches that might be taken to address a number of existing and future actions impacting on safer roads. In the course of the November workshop, the RSA organised a number of stakeholder sessions comprising input from participants. Each session was asked to consider a number of themes and the associated challenges and potential solutions.

3.1.4 Synthesis

There was a particularly high volume of proposals put forward by stakeholders and, after careful consideration, many of the proposals put forward via the sessions have been taken on board by the RSA.

It was not possible to frame new actions around all proposals, as it was necessary to prioritise the actions that stakeholders felt would yield the greatest return in terms of reducing deaths and injuries.

4.

Retrospective Analysis

4.1 Progress and Trends Since 2013

The overriding objective of the current strategy is to reduce fatalities to 124 or fewer by 2020 and to reduce serious injuries to 330 or fewer by 2020. The targets were set in 2012 and were established in the context of significant progressive reductions

in fatalities since 1998. The baseline used to set the fatality target was the number of fatalities that occurred in 2012, while the number of serious injuries that occurred in 2011 was used to set the target for serious injuries.

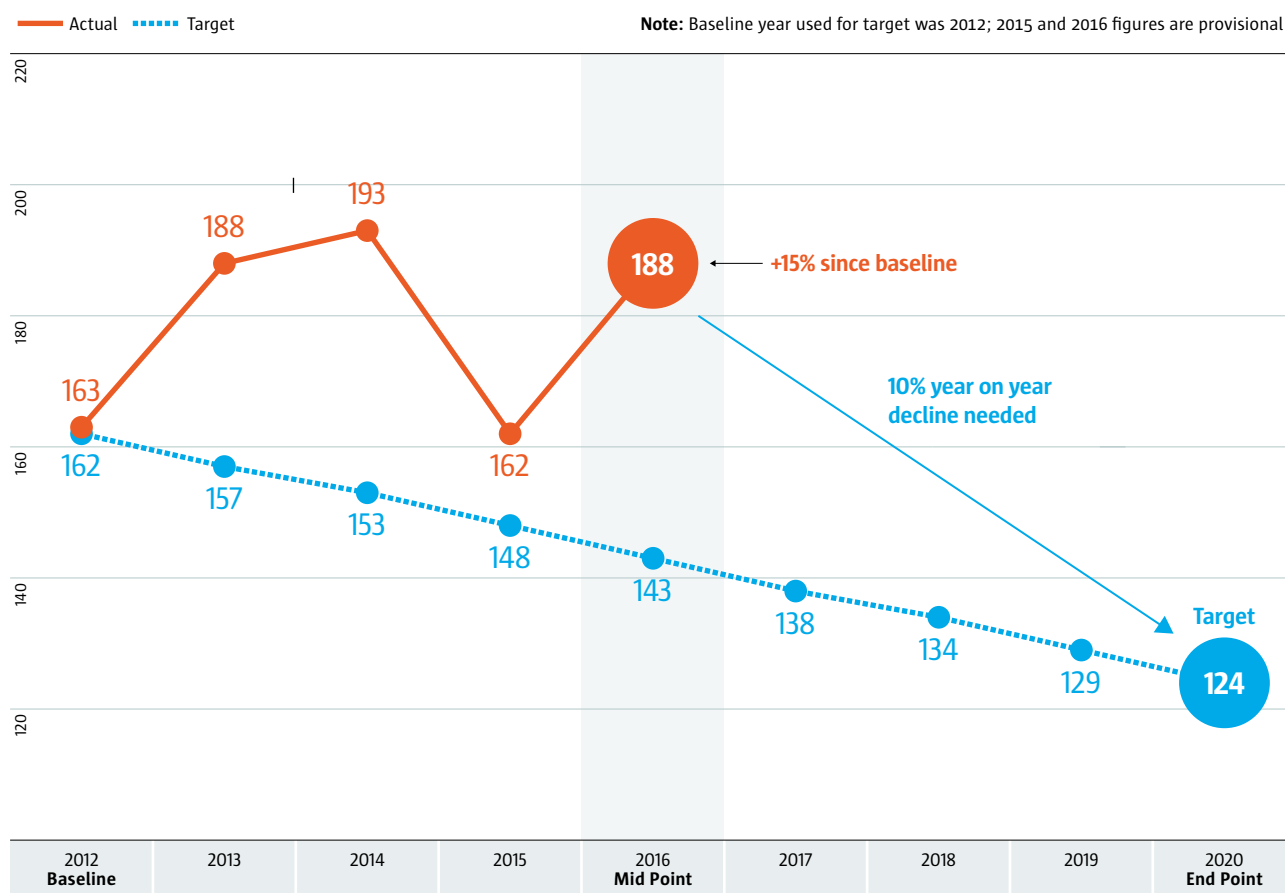


Figure 3 Fatality trends 2012–2016 – Performance v Target

Recent analysis from the first year of the current strategy to the end of 2016 shows an increase of 15% in the number of people killed on Irish roads. In order to reach the target of 124 or fewer fatalities by 2020, it will be necessary to achieve a 10% reduction in fatalities each year from 2016 onwards.

If Ireland had been on target at the end of 2016, there would have been no more than 143 fatalities during 2016. Unfortunately, provisional figures indicate that 188 people lost their lives on Irish roads in 2016.

It is important to identify particularly vulnerable groups in terms of road user type and gender/age profile, so that the RSA and stakeholders can target interventions appropriately. The first half of the current government's *Road Safety Strategy 2013–2020*, from 2013 to the end of 2016, has shown an increase in car user fatalities (+24%), as well as an increase in vulnerable road users (VRUs) fatalities (+20%).

Vehicle occupants typically represent approximately 60% of road fatalities, while VRUs represent 30–40% of all road users killed. A detailed breakdown of fatalities by road user type from the beginning of the current strategy period can be seen in Table 2.

Table 2 Fatalities by road user type 2013–2016

Road user type	2013		2014		2015*		2016*	
Driver	93	49.4%	76	39.3%	71	43.8%	83	44.1%
Passenger	33	17.5%	38	19.7%	27	16.7%	38	20.2%
Motorcyclist	26	13.8%	23	11.9%	22	13.6%	21	11.2%
Pillion passenger	0	0	1	0.5%	0	0	1	0.5%
Pedal cyclist	5	2.7%	13	6.7%	9	5.6%	10	5.3%
Pedestrian	31	16.4%	42	21.8%	33	20.4%	35	18.6%
Total	188	100%	193	100%	162	100%	188	100%

* Provisional figures

A review of the age and road user profile of fatalities during the first half of the current strategy clearly shows that younger and older road users are more likely to be killed. See Figure 4.

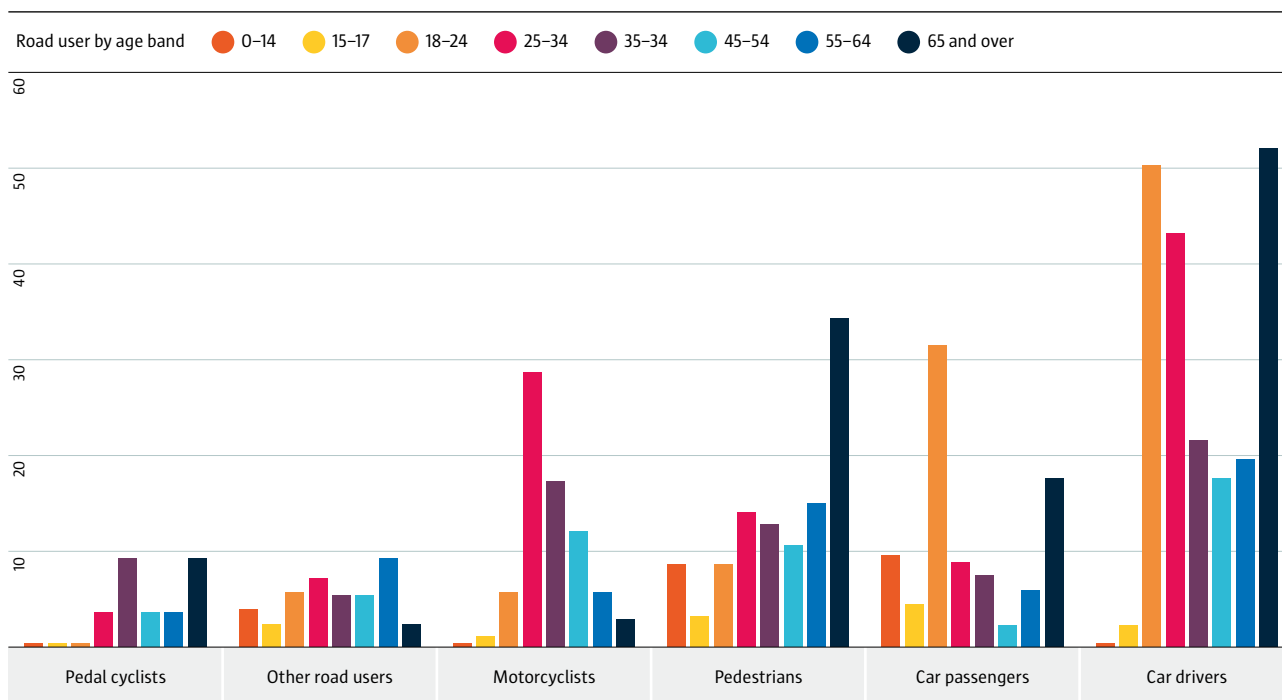


Figure 4 Fatalities by age and road user type 2013–2016

In identifying specific vulnerable groups, it is also important to provide a context in terms of the number of road users in a particular age group in the population. When looking at the fatality risk for drivers, for example, the number of drivers involved in fatal collisions in any given age group can be expressed as a proportion of the number of licensed drivers in the population in each age group.

Figure 5 expresses the driver fatality risk for each age group and shows that younger drivers aged 17–20 and 21–24 are significantly over-represented in fatal collisions relative to their number in the driving population. Similarly, older drivers aged 80+ are also over-represented relative to their number in the driving population. By contrast, drivers in the identified age categories from age 30 to 69 could be described as safer drivers, as they are under-represented in fatal collisions relative to their representation in the population of licensed drivers.

Over- and under-representation of driver's involvement in fatal collisions by age; 2013–2016 (Indexed against driver population by age)

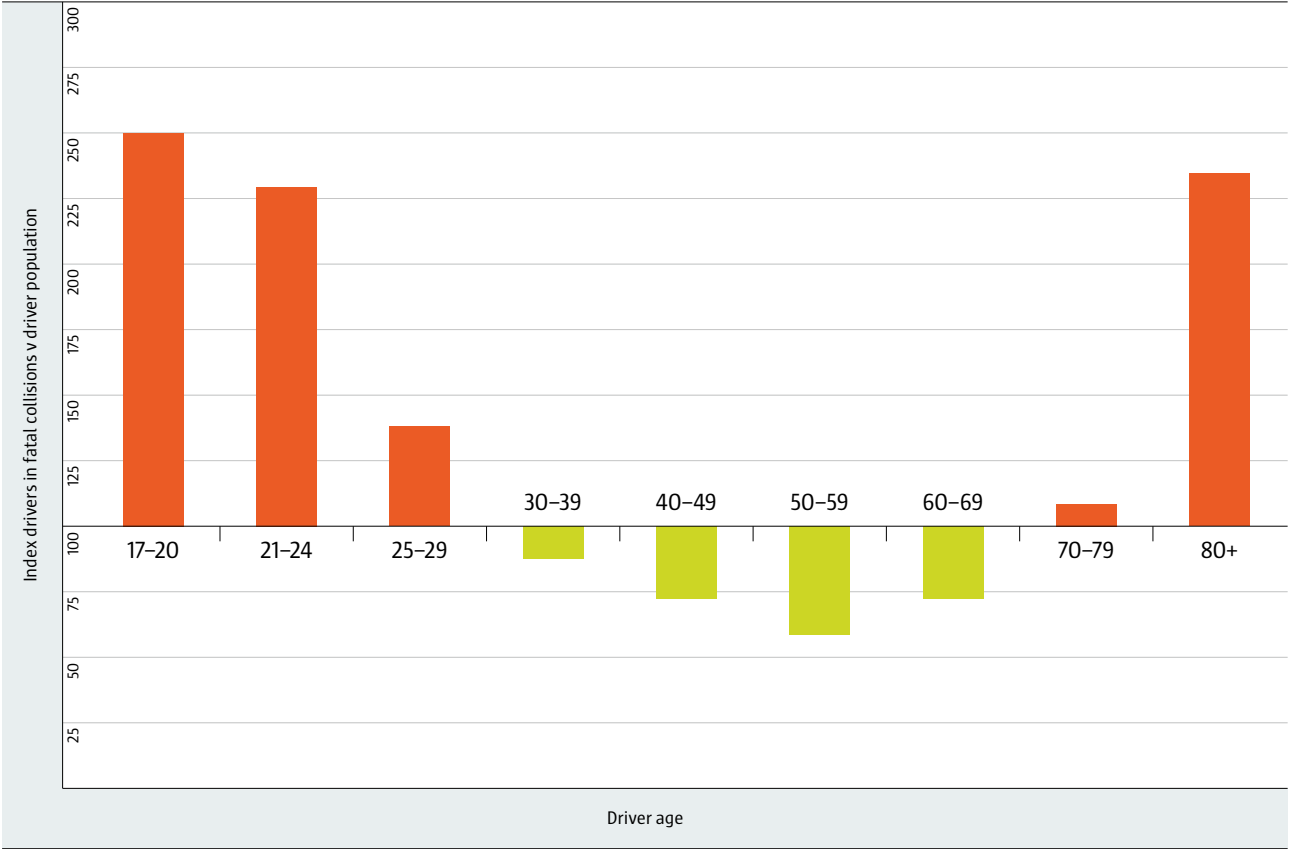


Figure 5 Representation of drivers in fatal collisions 2013–2016

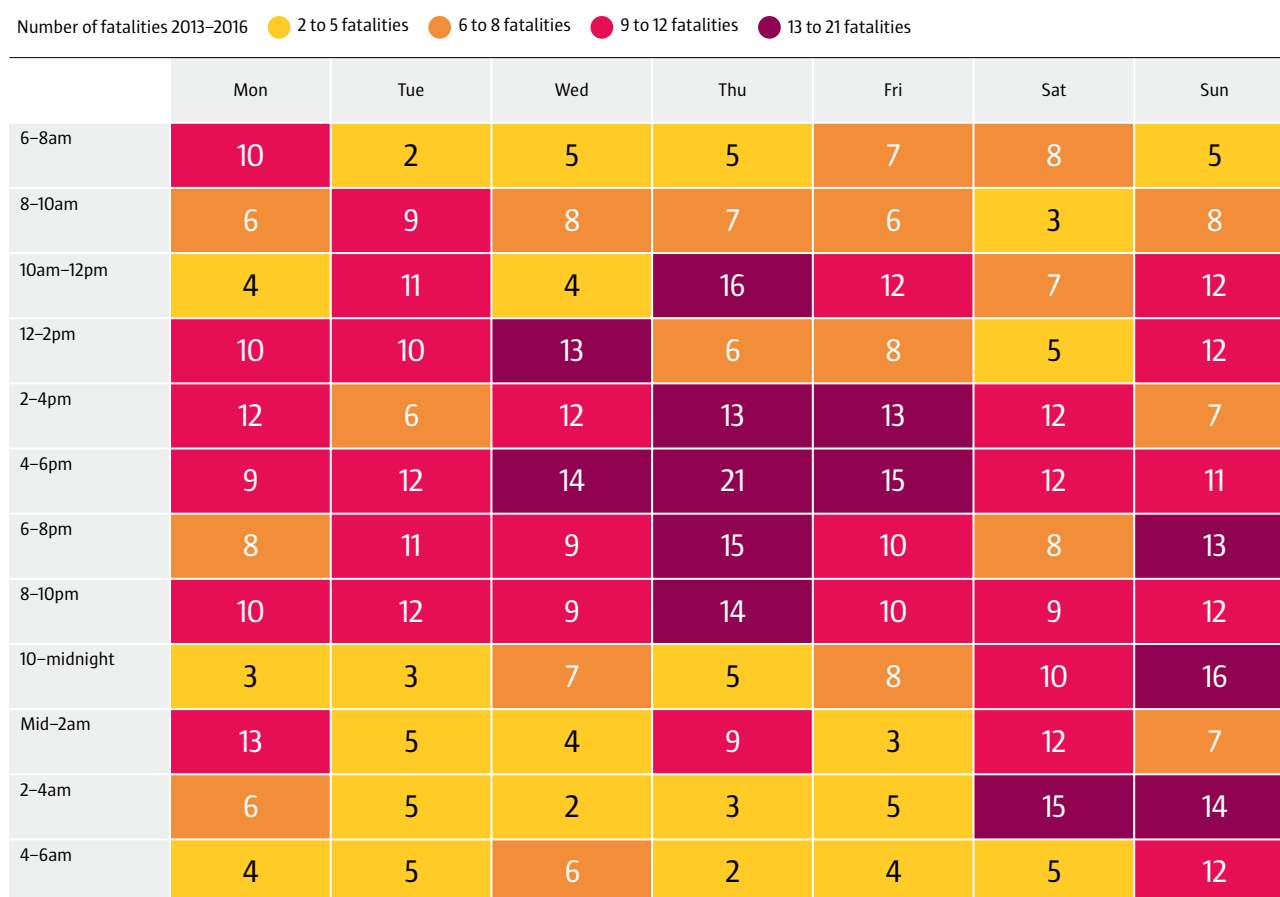


Figure 6 High-risk periods for fatal collisions broken down by time of day and day of week between 2013 and 2016

Figure 6 illustrates that there is a higher incidence of fatal collisions occurring during the period of 2pm to 10pm across the week, with Saturday and Sunday showing a particularly high incidence.

There was universal agreement that resources must be found to equip An Garda Síochána to provide the necessary level of targeted and visible enforcement to reduce the incidence of speeding, drink-driving, mobile phone use while driving and non-seat belt wearing in particular, and consideration should be given to the most dangerous times of day and days of week on our roads.

It is important to identify contextual factors and policy interventions that may have contributed to changes in trends. The following are particularly relevant:

- ▶ economic activity and vehicle kilometres travelled (VKT) **(4.1.1)**
- ▶ adequacy of key policy interventions, including awareness campaigns, legislation and enforcement activity **(4.1.2)**

An overview of the impact of economic factors and VKT has been set out below. A more detailed study of the impact of key policy interventions will be conducted by the RSA in 2017.

4.1.1 Economic activity and vehicle kilometres travelled (VKT)

Across Europe, there tends to be a broad correlation between vehicle numbers using the road and the number of collisions occurring. Figure 7 illustrates that there appears to be a direct relationship between the number of vehicle kilometres travelled, a measure of risk exposure, and the number of fatalities on Irish roads.

Notwithstanding the fact that Ireland has robust estimates for VKT, based on data compiled by the Central Statistics Office, there are currently no equivalent figures available for vulnerable road users. Therefore, it is more challenging to put any changes in fatalities and injuries in context for these subgroups of road users.

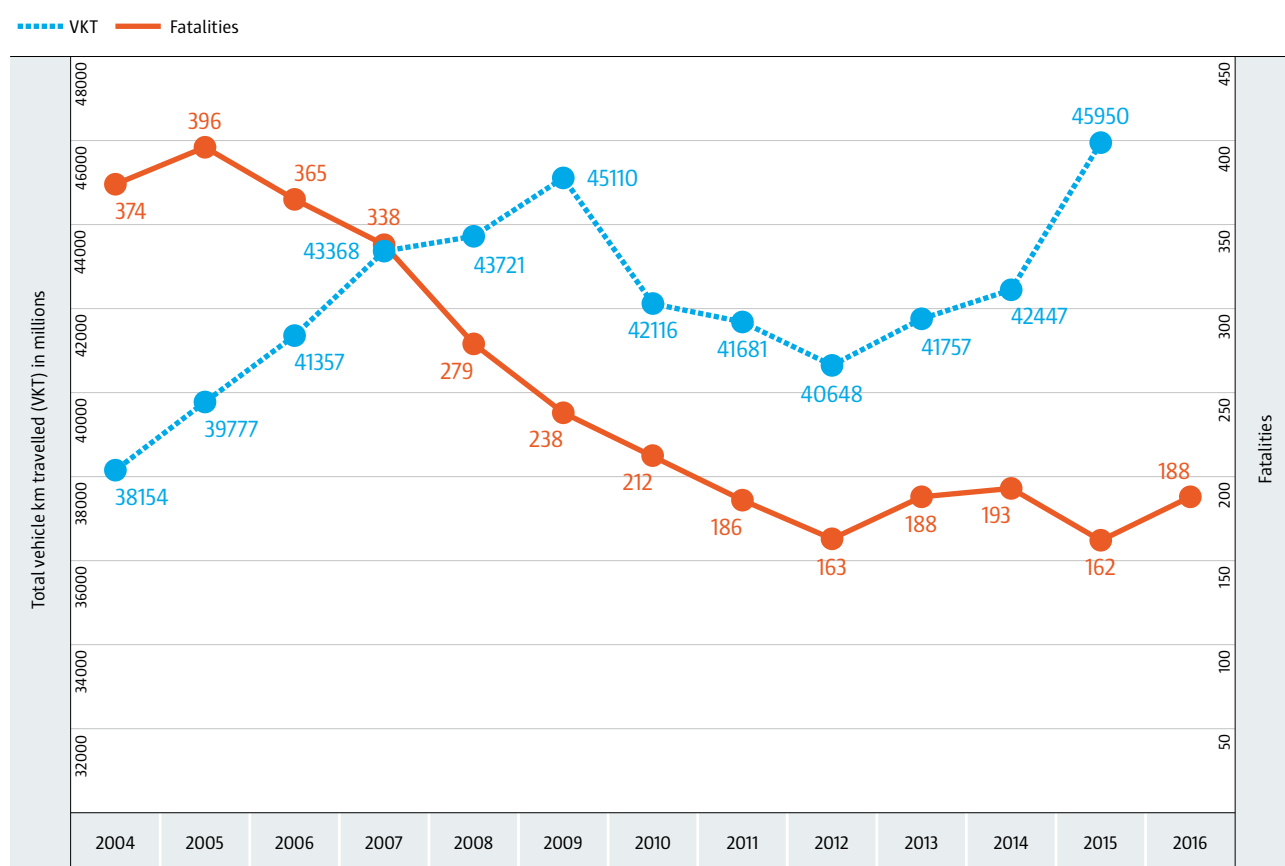


Figure 7 All road collision fatalities and vehicle kilometres travelled (VKT) 2004–2015⁶

International research⁷ also indicates that economic activity plays a role in collision trends, for the following reasons:

- ▶ Economic downturns are associated with reduced growth in traffic volumes.
- ▶ Disproportionate reduction in the exposure of high-risk groups in traffic, e.g. unemployment tends to be higher among young people than people in other age groups.

- ▶ Reductions in disposable income in downturns associated with more cautious road user behaviour, e.g. less drinking and driving, lower speed to save fuel, fewer holiday trips.

⁶ VKT figures source: www.cso.ie. Road fatalities source: the RSA.

⁷ *The Macro Economy and Road Safety* (2015). OECD.

Figure 8 shows an inverse relationship between unemployment and road fatalities in Ireland. As unemployment increased from 2008 to 2012, fatalities continued to decline. The fall in the unemployment rate in 2013 coincided with an increase in fatalities.

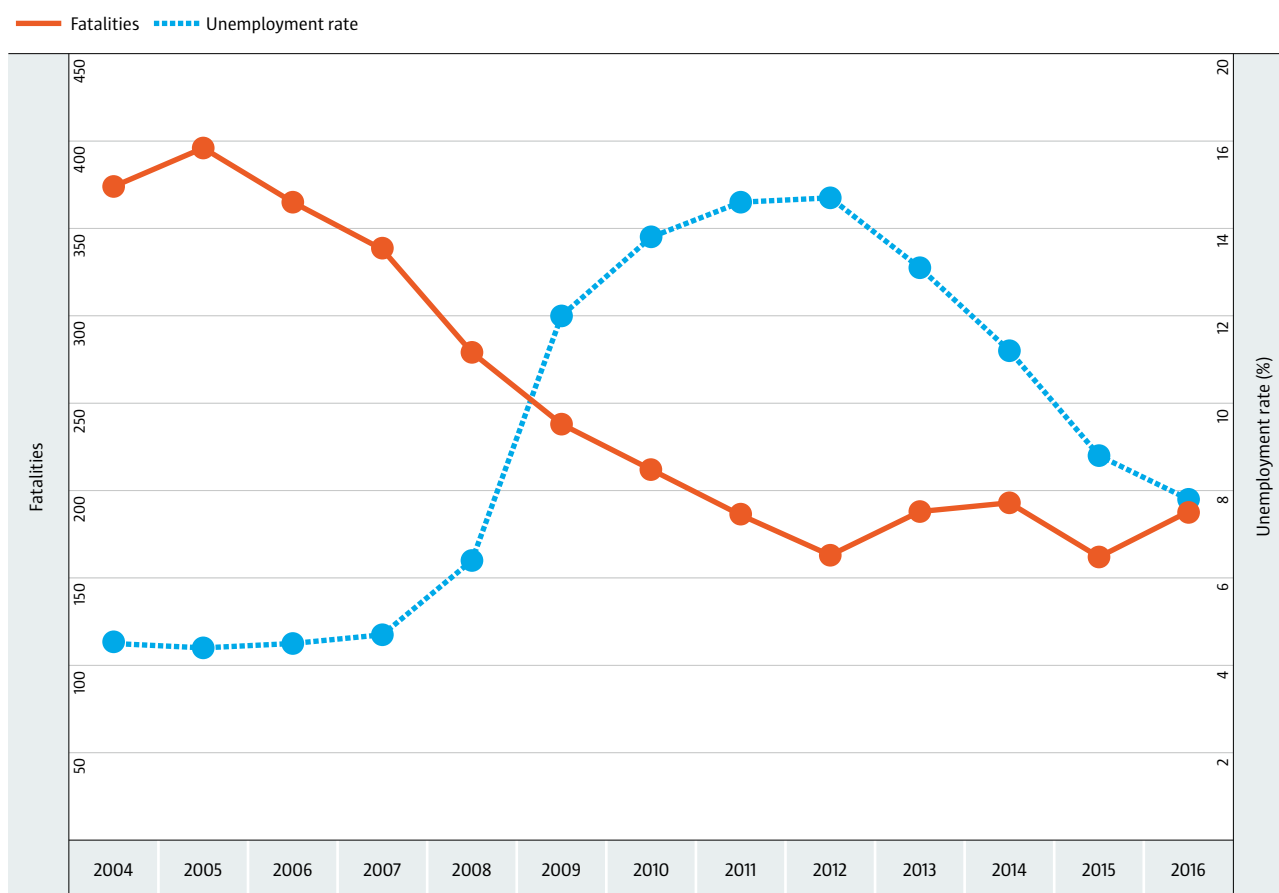


Figure 8 Road fatalities and unemployment rates in Ireland 2004–2016⁸

Forecasts from the Central Bank, the OECD and the IMF predict further declines in unemployment from 2017 to 2020, and this is likely to result in more vehicles using the road, and therefore increased risk exposure for collisions to occur. In this context, it is all the more important that all strategy stakeholders work together to implement policies across the four key areas of intervention (education, enforcement, engineering, evaluation) to counter the potential for increased fatalities and injuries.

It is also important to state that a new study published in 2017⁹ has determined that during the period 2008–2011, 23% of fatalities were classed as work-related. The proportion of work-related road traffic fatalities in Ireland was previously unknown. In an improved economic environment, there is potential for increased numbers of work-related fatalities, therefore continued collaboration among key stakeholders on Ireland's Driving for Work Programme is critical.

⁸ RSA Collision Database and CSO – unemployment figures.

⁹ Drummond, A. (2016). *Fatal Collisions on the Road and Safety and Health*. IOSH.

Figures 9 and 10 illustrate a range of measures that have contributed to reductions in fatalities and serious injuries in Ireland since Ireland's first government's *Road Safety Strategy*. These measures, covering legislative changes and penalties for driving

offences, enforcement measures, as well as public awareness and education campaigns, are crucial and must be intensified to ensure that any effects of greater risk exposure due to an improving economy can be mitigated.



Figure 9 Road fatalities since first Road Safety Strategy

Year	Introduction of or update to:	Year	Introduction of or update to:
1999	▶ National Car Test (NCT)	2002	▶ Penalty point system for driving offences ▶ Seat belt/drink-driving campaign
2006	▶ Establishment of the Road Safety Authority (RSA) ▶ Mandatory Alcohol Testing (MAT) introduced	2007	▶ Stricter penalties for drink driving offences
2010	▶ Garda mobile safety cameras – GoSafe ▶ Graduated Driving Licensing (GDL) ▶ Crashed Lives campaign	2011	▶ Lowered Blood Alcohol Concentration (BAC) levels
2013	▶ Commercial Vehicle Roadworthiness Reform programme introduced ▶ Speed limit review ▶ Better Safer Driver – Cyclist Campaigns	2014	▶ Novice plates for newly qualified drivers ▶ Roadside Impairment Testing (RIT) ▶ Additions and increases to penalty points
2015	▶ Power to arrest disqualified drivers ▶ Driver distraction campaigns	2016	▶ Four pre-crash reports released ▶ Penalties for defective tyres ▶ Low level speeding campaign

Figure 10 Key road safety interventions

4.1.2 Key policy interventions 2013–2016

Figure 10 sets out some of the key policy interventions, including awareness/education campaigns, legislation and enforcement activity implemented by key strategy stakeholders during the period 2013–2016.













			
<p>RISC Database</p> <p>Commercial Vehicle Roadworthiness Reform Programme</p> <p>Review, Update and Expand GDL Programme</p> <p>Driving For Work Programme</p> <p>Nationwide Road Safety Education Service</p> <p>Evidence Based Interventions – Distraction</p> <p>Pre-Crash Research</p> <p>Maximum Abbreviated Injury Scale (MAIS)</p>	<p>RISC Database</p> <p>Introduction of Roadside Impairment Testing</p> <p>Fixed Charge Notices for Cyclists</p> <p>Launch of Commercial Vehicle</p> <p>Roadworthiness Reform Programme</p> <p>Driving For Work Programme</p> <p>Pre-Crash Research</p>	<p>Introduction of Roadside Impairment Testing</p> <p>Fixed Charge Notices for Cyclists</p> <p>Penalty Point Increases</p> <p>Introduction of Rural Speed Limit</p>	<p>Provide Preliminary Drug Testing Devices for use in garda stations and mobile garda units</p> <p>Manage Preliminary Drug Testing Devices on an ongoing basis</p> <p>Review Preliminary Drug Testing Implementation and Use</p> <p>Maintain accreditation in the area of preliminary drug testing</p> <p>Keep watching brief on emerging technology in the area of mobile preliminary drug testing</p>
			
<p>Service Area Programme to combat Driver Fatigue</p> <p>Development of Design Guidelines for Forgiving Roadsides</p> <p>Implementation of Road Infrastructure Safety Management Directive</p>	<p>Driving For Work Programme</p> <p>Load Securing Programme</p> <p>Reporting on work-related road collisions</p>	<p>Increase Community First Responders</p>	<p>Maximum Abbreviated Injury Scale (MAIS)</p>
			

Figure 10 Key policy interventions 2013–2016

4.2 Contributory Factors to Collisions

It is widely acknowledged that speed and impaired driving (alcohol, drugs, fatigue, distraction), non-wearing of seat belts, and unsafe behaviour by/toward vulnerable road users (VRUs) remain the main contributory factors in collisions, both in Ireland and internationally. Reducing the number of collisions and casualties caused by these killer behaviours is the single most important means for Ireland to achieve its target on fatalities by 2020. Interventions to address these killer behaviours must be further developed and enhanced. However, these interventions must be coupled with targeted visible enforcement and harsher penalties for non-compliance.

Pre-crash behaviour study

In 2016, the RSA published a number of pre-crash behaviour reports (vehicle factors, alcohol, speeding, motorcyclists) following an analysis of 867 An Garda Síochána fatal collision investigation files for the period 2008–2012. The aim was to identify the main contributory factors in fatal collisions. During this time, there were 983 fatal collisions which occurred on Irish roads, claiming the lives of 1,077 people.

A summary of the main killer behaviours, including the reference to the latest evidence which indicates their prevalence in fatal collisions has been set out in Figure 11.

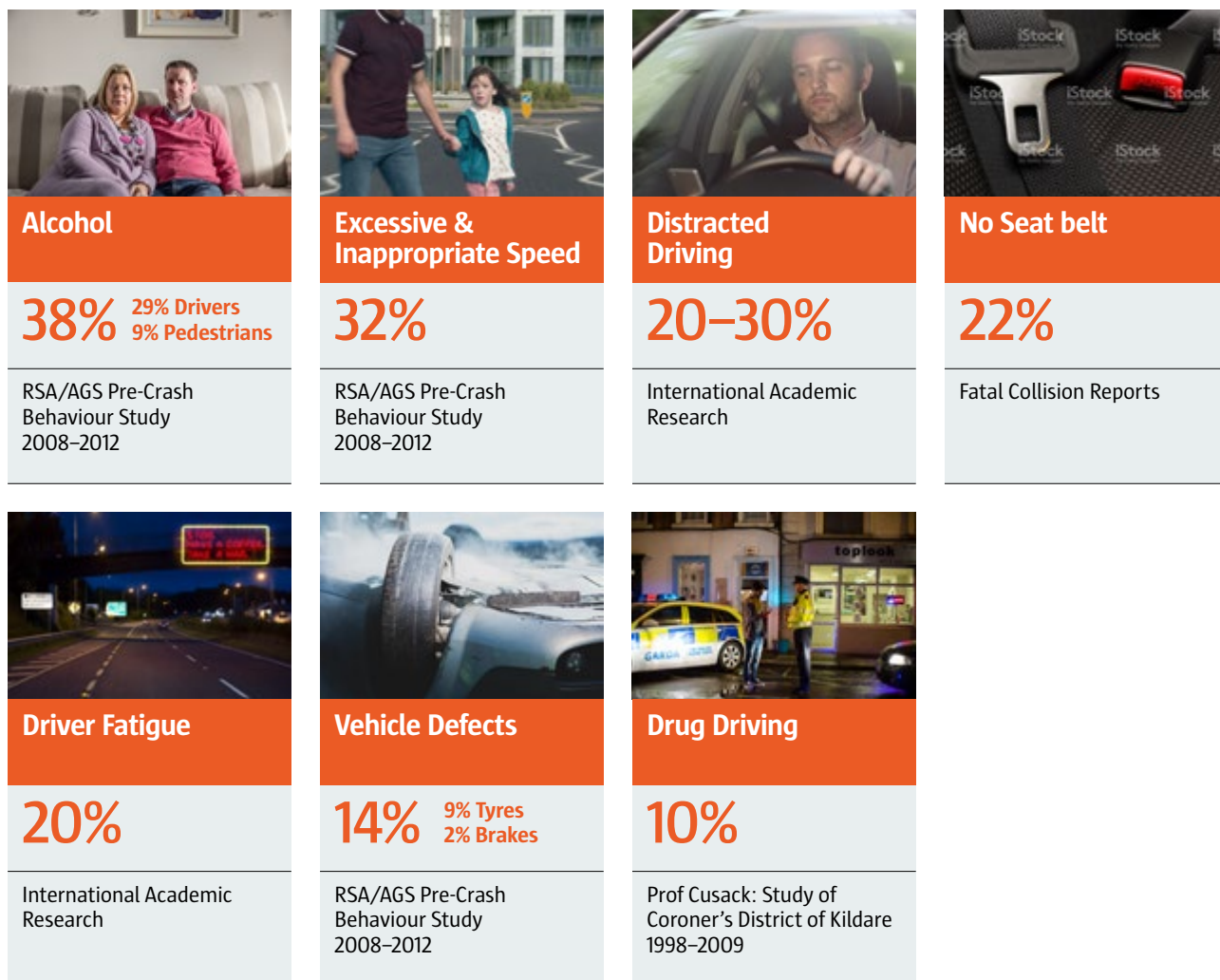


Figure 11 Killer behaviours

Appendix B (page 59) gives a more detailed overview of Contributory Factors to Collisions.

4.3 European Context

Ireland remains the fifth best performing country in the EU (behind Sweden, Malta, the United Kingdom and Denmark) in terms of road fatalities per million population, based on the latest information available in 2015.

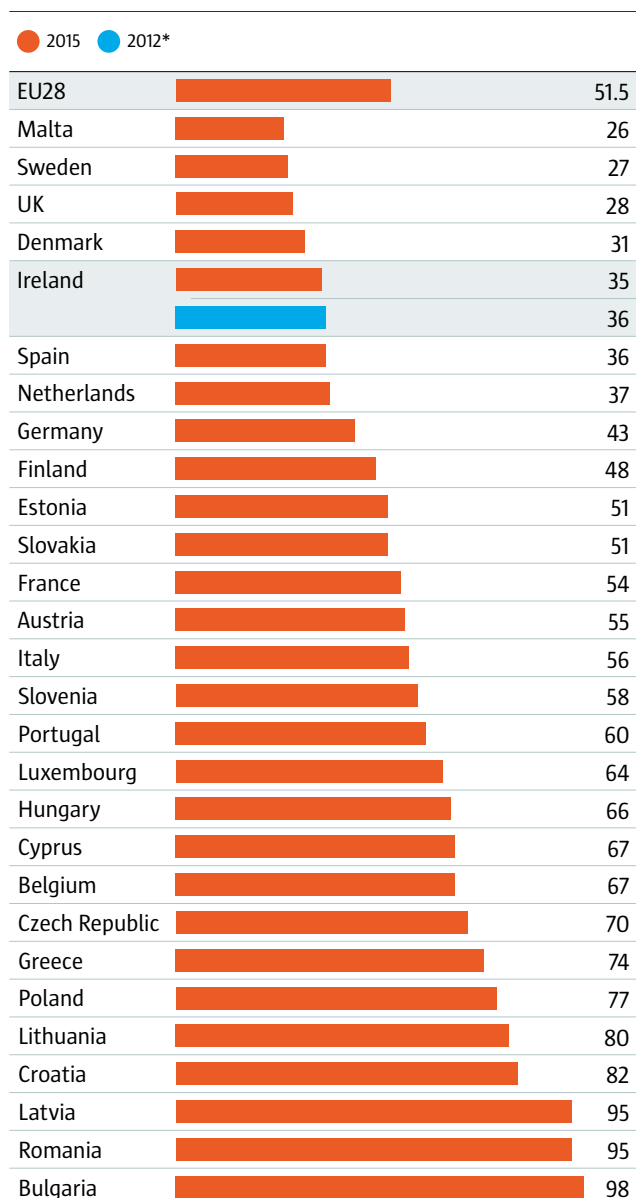


Figure 12 EU road fatalities per million of population

* 2012 fatality figures are used as the baseline in setting targets for fatalities.

In 2011, the European Commission launched a European Road Safety Programme (ERSP), *Towards a European Road Safety Area: Policy Orientations on Road Safety 2011–2020*. Its overall objective was to halve the number of road deaths in EU countries and significantly reduce the number of serious injuries. The government's *Road Safety Strategy 2013–2020* is closely aligned to the objectives set out in the ERSP. A specific target for the reduction in serious injuries was due to be set at the mid-term review of the ERSP, but this has not yet been established. The European Transport Safety Council (ETSC) has been campaigning, on behalf of EU member states, to ensure that a target is set, and this may happen in 2017.

At the mid-term stage (end of 2015), the reduction in deaths fell well short of the desired number, with an overall reduction of 17%, as opposed to 29% if the programme numbers were to be achieved.¹⁰ While the reduction in fatalities during the first six years is significant, (down from 63 per million in EU 28 in 2010 to 52 per million of population in 2015¹¹), there is a realisation across the EU that more action is needed.

There continues to be a strong commitment to road safety across EU institutions. Eight EU transport ministers, including the Irish minister Mr Shane Ross TD, have called on the European Commission to 'speed up' plans to upgrade vehicle safety standards, saying road safety should be 'top priority'. As a member of the ETSC, the RSA is supportive of this policy. The European Council and European Commission have a stated aim of promoting a Europe-wide road safety culture, based on shared values, and of improving road users' behaviour by continued and effective education and training, taking into account the specific needs of vulnerable road users and focusing in particular on novice and senior drivers, motorcyclists, as well as professional drivers.

10 European Transport Safety Council (p. 13), *10th Road Safety PIN Report*. Retrieved from <http://etsc.eu/wp-content/uploads/10-PIN-annual-report-FINAL.pdf>.

11 European Transport Safety Council, *10th Road Safety PIN Report*.

4.4 Serious Injuries

One of the priorities identified in the government's *Road Safety Strategy 2013–2020* was to bring greater focus on serious injuries, particularly given that serious injuries can often lead to lifelong disability and high costs associated with treatment and care. The definition of a serious injury in road traffic collisions used in Ireland by the RSA and An Garda Síochána is as follows:

An injury for which the person is detained in hospital as an 'in-patient' or any of the following injuries whether or not detained in hospital: fractures, concussion, internal injuries, crushing, severe cuts and lacerations, severe general shock requiring medical treatment.

The government's *Road Safety Strategy 2013–2020* set a provisional target of a 30% reduction in serious injuries from 472 (2011) to 330 by 2020. However, a provision was made for Ireland to review the target in light of the work being undertaken by

the European Commission to agree a new medical definition of serious injury. It is now opportune, in the context of the mid-term evaluation, and in light of Ireland's progress in applying the new EU medical definition of a serious injury, to engage in a discussion with stakeholders on the setting of a new target.

An analysis of the change in serious injury figures for the first half of the government's *Road Safety Strategy 2013–2020* shows a significant increase in the number of people seriously injured, up from 474 at the end of 2012 to 632, based on provisional information available for 2016 (+33%). It is important to note that there was a change in the way in which the RSA receives collision data from An Garda Síochána in 2014, and this enhanced data collection method, which incorporates a two-way validation process of data, is most likely providing more accurate figures on the incidence of serious injuries.

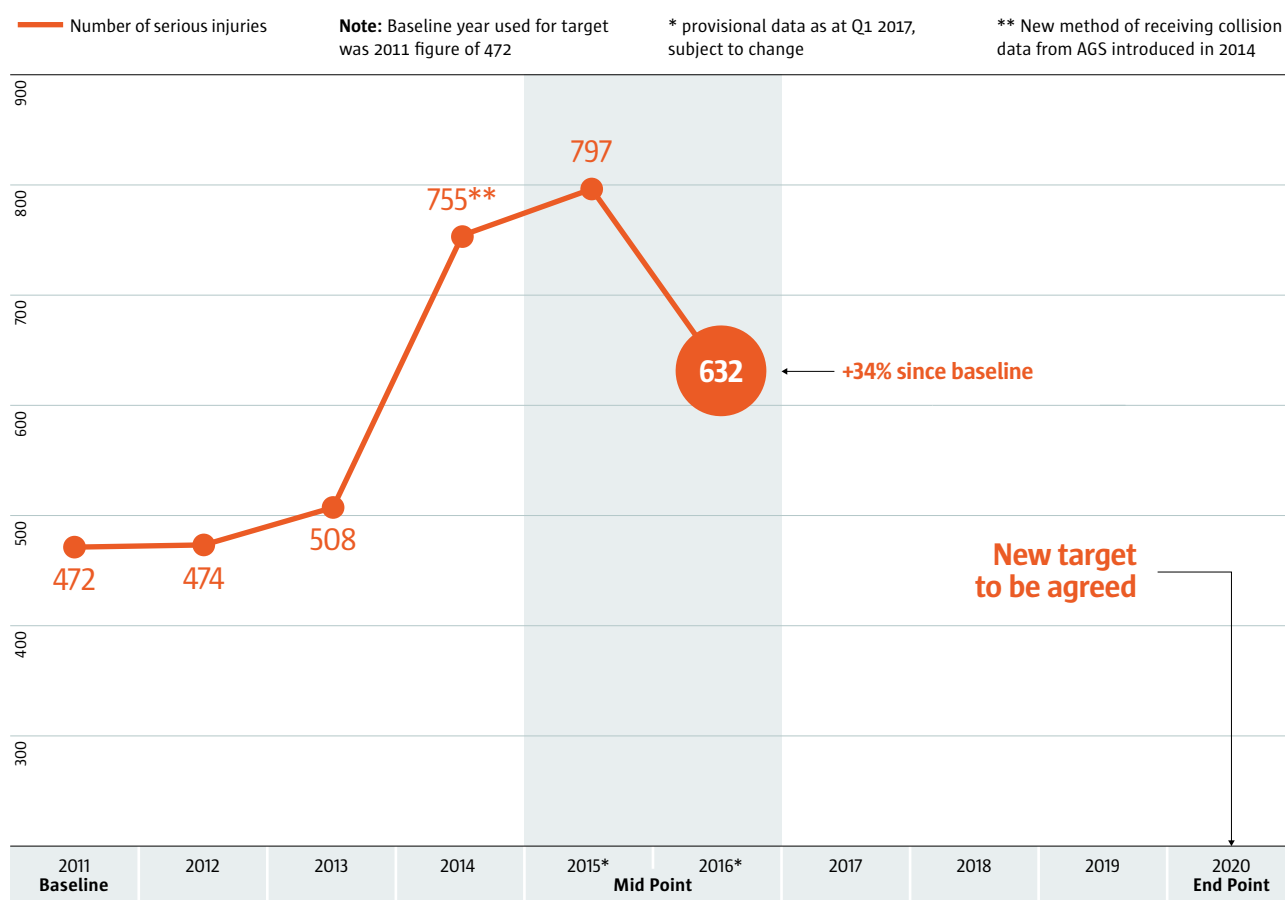


Figure 13 Serious injuries Ireland 2011–2016 performance

Most EU countries follow the same approach as Ireland, whereby the number of serious injuries following road traffic collisions (RTCs) is recorded from police data gathered at the scene of a collision. Given that the garda at the scene is not medically trained, it is possible that injuries, which appear to be minor to the untrained eye, transpire to be serious and result in hospital admissions and longer term treatment.

A study conducted in Ireland by Sheridan et al. (2011)¹² indicated that the true incidence of serious injuries may be 3.5 times higher than currently reported using garda records. There would be significant benefits for Ireland, in terms of national road safety policy and health care planning, to more accurately quantify the number of serious injuries incurred annually due to RTCs.

Action 116 of the government's *Road Safety Strategy 2013–2020* was designed to 'Establish the definition of serious injuries to be used in the collection of serious injury data and the setting of a target for a reduction in serious injuries.'

This action was developed to formalise the work to be conducted by Ireland in reporting on serious injuries using a medical definition agreed across all EU member states. The definition of a serious injury has been agreed (MAIS3+: Maximum Abbreviated Injury Scale) and Ireland has made progress in reporting to the EC on serious injuries using this definition.

Appendix C (page 61) gives a detailed overview of short- and long-term steps required for Ireland to be able to report accurately on serious injury data.

12 Sheridan, A., Howell, F., McKeown, N., & Bedford, D. (2011). *Admission to acute hospitals for injuries as a result of road traffic collisions in Ireland, 2005–2009*. Department of Public Health, Navan, Health Service Executive Dublin North East.

4.5 Road Safety Strategy 2013–2020: Progress Reports

Progress on meeting the actions of the government's *Road Safety Strategy 2013–2020* is monitored in a number of ways. The RSA provides a coordination role in the quarterly updates which are given by each stakeholder in relation to their individual actions, and the overall compilation of these updates is done by the RSA. In addition, the Ministerial Committee on Road Safety meets biannually to provide oversight on the strategy and review progress on meeting the actions.

Table 3 Progress on 144 strategy actions

Completed	70 (49%)
On Schedule	44 (30%)
Behind Schedule	30 (21%)

On the basis of reports submitted by the key strategy stakeholders, in advance of the workshop in November 2016, the vast majority of actions have been categorised as completed (49%) or on schedule (30%). A total of 30 actions were reported as behind schedule (21%).

Appendix A (page 48) contains a full list of all the actions, complete with status.

Furthermore, an analysis has been carried out on the 30 behind schedule actions to identify the challenges, revised timelines and proposed solutions to successfully implement all actions within the lifetime of the strategy. These have been discussed and agreed with the key strategy stakeholders. See **Section 5.2** (page 37).

4.6 Challenges to Implementation

There were 30 behind schedule actions reported by key strategy stakeholders who identified the main reasons for lack of progress or for non-completion to date. The following summarises the reported challenges.

4.6.1 Resources and funding

As a direct result of the economic downturn, all of the key strategy stakeholders charged with implementation faced constant challenges posed by reduced funding and/or resources from the start of the strategy. From a resource perspective, some stakeholders reduced the numbers involved in road safety while others, because of constrained numbers, were unable to replace departing staff or to expand areas in need of greater resources. The reduction in funding had particular implications for the roads budget when elements of improvement and maintenance programmes were not proceeded with. When such constraints are imposed on bodies, road safety tends to slip down the priority lists and less attention is given to the area than would normally be expected. With an improved economic climate, all of the bodies concerned must reprioritise road safety matters and devote funds and resources to road safety.

In particular, restored funding of the Garda National Roads Policing Bureau to ensure optimal enforcement, and restored funding for Transport Infrastructure Ireland and the County and City Management Association/local authorities to ensure maintenance of the road network will make a significant impact on road safety.

4.6.2 Legislation

The Department of Transport, Tourism and Sport has been successful over a number of years in processing and supporting the enactment of many pieces of road traffic legislation. However, stakeholders have expressed frustration at the length of time taken to bring measures from concept stage to obtaining legal powers. This has led to a delay in meeting the scheduled completion date set for some actions. In summary, the challenge here is the enactment of new legislation in a timely manner, having been given the appropriate period of consideration so as to ensure in so far as possible that it is robust and likely to withstand challenges.

4.6.3 Restrictions on data sharing

An inability to share or receive critical data was reported by agencies as a major obstacle to the implementation of some actions. Data protection legislation appears to prohibit the sharing of certain information between state bodies. The result is that progress could not be made on actions such as those relating to the statistical matching of collision data with hospital data to progress with Ireland's obligations to report on serious injuries using a medical definition and the integration of collision data into the Commercial Vehicle Risk Rating system. Further representations must be made to the Data Protection Commissioner on these matters, stressing the importance of data sharing for road safety purposes while respecting the sensitivity of the data for all parties concerned.

4.7 Outcome of Mid-Term Evaluation Stakeholder Sessions

Stakeholder sessions, held as part of the workshop, involved an in-depth discussion by stakeholders on their perceptions of the challenges associated with each of the six themes, and also the identification of specific actions to address the challenges. A summary of the feedback on each theme has been set out in this section.

After careful consideration, many of the proposals put forward in this section have been taken on board by the RSA and stakeholders, and these are reflected in the next section of this document. It was not possible to frame new actions around all proposals, as it was necessary to prioritise the actions that stakeholders felt would yield the greatest return in terms of reducing deaths and injuries allied to the practicality of their implementation.

4.7.1 Education

There was consensus that education is critical in addressing the current crisis, and that education should be provided to children at the earliest stage and age-appropriately tailored through pre-driving years. There was broad agreement that the current programme of education should be evaluated, and that there would be value in making road safety education mandatory as a secondary school subject.

A number of other specific actions for consideration were put forward:

- ▶ The use of alcohol interlocks could be considered as part of learning to drive.
- ▶ A road safety education programme for employers could be developed.

4.7.2 Engineering

There was consensus that adequate funding must be restored for maintaining existing roads in a safe condition, as the current funding crisis situation faced by Transport Infrastructure Ireland and local authorities is not sustainable.

A number of other specific actions for consideration were put forward:

- ▶ A 'black box' mechanism could be considered for inclusion in all vehicles.
- ▶ A review of the NCT and CVRT processes could be considered.
- ▶ HCVs should be denied access to urban/pedestrian areas to protect VRUs.

- ▶ With-flow parking only could be introduced in urban areas.
- ▶ Cyclists' requirements should be taken into account in road planning.
- ▶ Roadside cameras should be considered for the detection of mobile phone use and non-wearing of seat belts.
- ▶ Motorway service stations should provide vehicle-walk-around-check spaces.

4.7.3 Enforcement

There was consensus that an increase in garda numbers is essential to bringing about improved behaviour and reducing the number of people being killed/injured on our roads. Gardaí must have instant, direct access to all current, available information on vehicles and drivers to assist them in their work. There was a general consensus among key stakeholders that enforcement efforts should be concentrated on the main killer behaviours, namely speed, alcohol, non-wearing of seat belts and distraction, including mobile phone use.

A number of other specific actions for consideration were put forward:

- ▶ Alcohol interlocks should be used for recidivist drink-driving offenders.
- ▶ The establishment of a separate Traffic Police Force could be considered.

4.7.4 New technologies

There was agreement among stakeholders that technology has significant potential to enhance the work of stakeholders across a number of areas of intervention, from education to enforcement and vehicle design. Specific technologies mentioned included:

Automatic number plate recognition (ANPR): this must be rolled-out in full without delay. Up-to-date information available to the gardaí at the roadside is critical.

Ireland should be in a position to influence the development of new technologies at EU level and this should include enforcement capabilities.

Intelligent speed assistance (ISA) technologies should be adopted in vehicles in Ireland to reduce the incidence of speeding.

Virtual learning platforms should be considered for education programmes.

4.7.5 Tackling killer behaviours

There was consensus that reduced garda enforcement was a key contributor to the prevalence of speeding, drink-driving and mobile phone usage, and that this must be addressed to reduce road user engagement in the killer behaviours. Furthermore, it was agreed that the need for continuous awareness and personal responsibility by road users must be stressed. It was also put forward that road safety education should become a mandatory part of the national curriculum and that the causes of collisions involving 18–24 year olds should be examined in greater detail. This will help reduce engagement in the killer behaviours in the long term.

4.7.8 Data sharing

There was broad consensus that restrictions on data sharing across agencies (An Garda Síochána, RSA, DTTAS, insurance industry, health, etc.) is counterproductive, and that this should be addressed. Specifically, it was proposed that a joint case should be submitted to the Data Protection Commissioner by relevant state agencies indicating the importance of sharing data in the public interest, to inform evidence-based policies. Agencies should take steps to ensure that information held is accurate and up to date. Greater analysis of critical information should be undertaken and shared.

5.

Prospective Analysis – from now to 2020

In addition to the actions remaining for completion in the government's *Road Safety Strategy 2013–2020*, the mid-term evaluation has identified the need for the development of further new actions. The implementation of these actions will further contribute to Ireland's ability to reduce fatalities and serious injuries in line with the targets set. Twenty-two new actions have been identified.

These actions are presented in terms of their anticipated impact on the one hand and their anticipated complexity on the other, as this categorisation will provide valuable context for stakeholders in planning and prioritising their implementation. The two criteria used for categorisation are set out below.

- ▶ **Impact:** This describes the potential of the intervention/action to change road behaviour by reducing road user engagement in the killer behaviours, and ultimately reduce fatalities and serious injuries.
- ▶ **Complexity:** This describes the difficulty in introducing the intervention/action, in terms of anticipated time frames for delivery, and the human/financial resources or legislative changes required.

All 22 actions have been graphically illustrated on a matrix¹³ as shown in Figure 14.

The vertical axis indicates the impact of the intervention, whereby an action can be described as either 'low impact' or 'high impact'. The horizontal axis indicates the complexity of the intervention, whereby an action can be described as either 'less complex' or 'more complex'.

Each action sits in one of four boxes, and each box has been colour coded to reflect their anticipated impact/complexity.

GREEN: High impact/less complex

Actions within this box will directly lead to reduced fatalities and serious injuries, and are relatively straightforward to implement. These actions require immediate prioritisation.

ORANGE: High impact/more complex

Actions within this box will directly lead to reduced fatalities and serious injuries, but these are very complex to implement. These require immediate prioritisation given that considerable planning and pre-work will be required before these will be successfully implemented.

YELLOW: Low impact/less complex

Actions within this box have an anticipated lower or more indirect impact on the reduction in fatalities and serious injuries, but these are relatively straightforward to implement. These actions should be progressed without delay. Even though their impact is indirect, these actions have an important role to play in the delivery of the government's *Road Safety Strategy 2013–2020*. For example, in some cases their implementation will support the delivery of other critical actions.

BLUE: Low impact/more complex

Actions within this box have an anticipated lower or more indirect impact on the reduction in fatalities, but these are very complex to implement. These actions should be progressed without delay, particularly given that considerable planning and pre-work will be required before these will be successfully implemented. Even though their impact is indirect, these actions have an important role to play in the delivery of the government's *Road Safety Strategy 2013–2020*. For example, in some cases their implementation will support the delivery of other critical actions. The tables under Section 5.1, which follows the matrix, set out the actions in detail.

¹³ Adapted from a prioritisation matrix developed in the context of the *South African National Road Safety Strategy 2016–2020*.

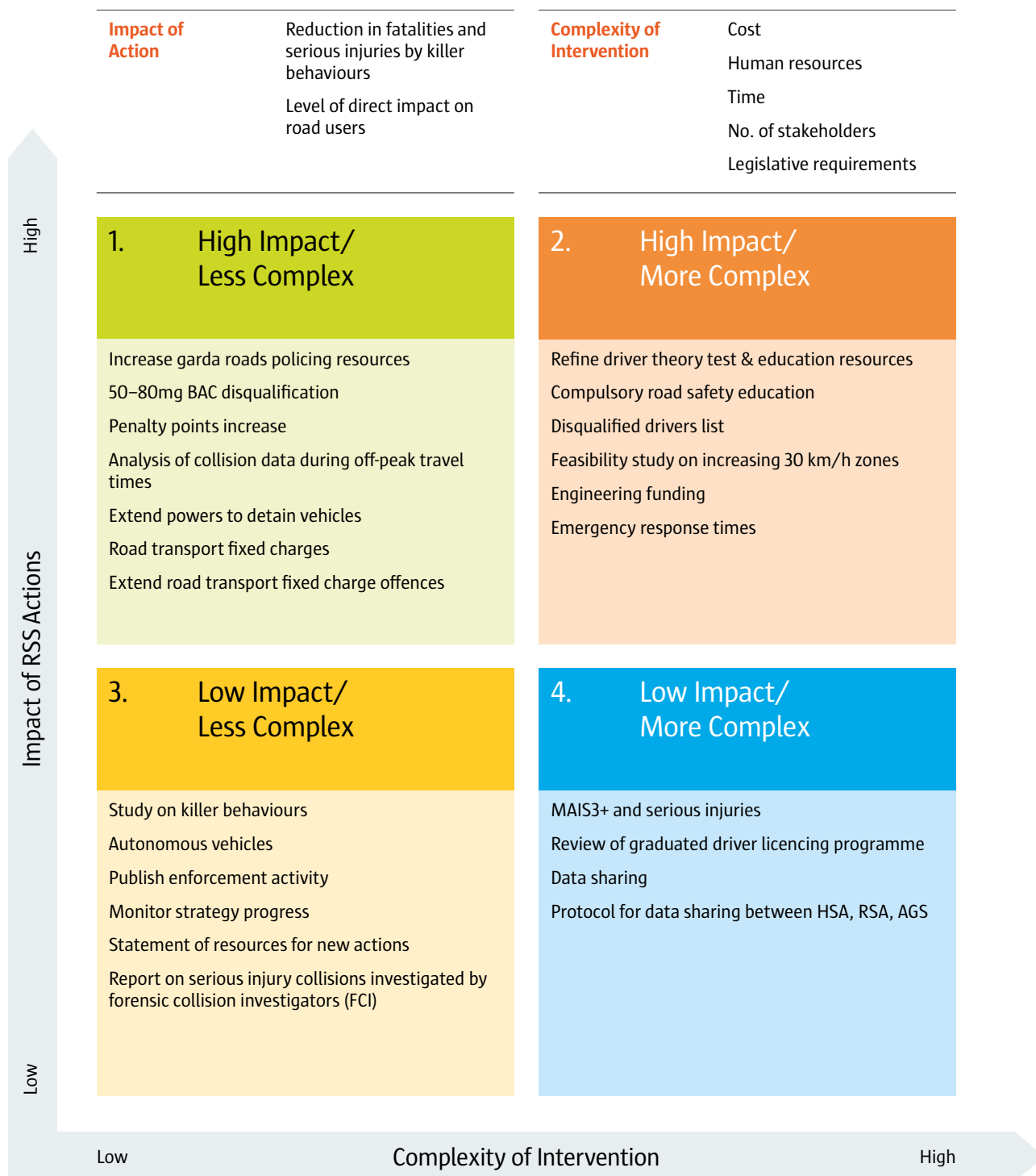


Figure 14 Prioritisation matrix

5.1 New Actions

Table 4 High impact, less complex

High impact/less complex	Lead agency	Completion date	Support agency	Category
1 Increase garda numbers in Road Policing Unit, now at 681 members, by 10% year on year up to 2020 (749 in 2017, 824 in 2018, 906 in 2019 and 997 in 2020) or further should targets in road safety not be achieved. The targeted deployment of these resources is to be informed by research	DJE	Annually up to 2020	AGS	Enforcement
2 Replace the current administrative sanction (penalty points) with a disqualification from driving for drivers detected with a presence of alcohol between 50 mgs and 80 mgs of alcohol/100 ml of blood or equivalent levels from urine or breath	Minister for Transport, Tourism and Sport/DTTAS	Q1 2018	MBRS, AGS, RSA	Enforcement
3 Recommend that penalties for the following offences be increased: speeding, mobile phone use, non-wearing of seat belts, carrying unrestrained children in a vehicle	RSA	Q4 2018	DTTAS	Enforcement
4 Extend the powers of An Garda Síochána to detain, remove, store, and subsequently release or dispose of vehicles, as provided for under section 41 of the Road Traffic Act 1994, to include vehicles in use in a public place where the person driving is a learner driver who is unaccompanied by a duly qualified driver	DTTAS	Q3 2019	AGS, RSA	Enforcement
5 Extend fixed charge notice system in respect of road transport offences	DTTAS	Q3 2018	AGS, RSA	Enforcement
6 Conduct an analysis of existing collision data to identify the profile of fatal and serious injury collisions occurring during off-peak travel times (i.e. 10pm to 5am) to inform education / enforcement strategies	AGS/RSA	Q2 2018	N/A	Evaluation

Table 5 High impact, more complex

High impact/more complex	Lead agency	Completion date	Support agency	Category
7 Refine the driver theory test and existing road safety education resources commencing with the junior cycle programme to incorporate new learning methodologies and technologies	RSA	Q4 2018	DES, NCCA	Education
8 Develop a business case to support the inclusion of compulsory road safety education in the curriculum for secondary schools	RSA	Q4 2018	DES	Education
9 Subject to legal advice, examine the steps necessary for the RSA to publish on its website a list of persons disqualified from driving by the courts	RSA	Q2 2018	DTTAS, DJE	Enforcement
10 Review the feasibility of extending the number of 30-km/h speed limit zones in VRU-rich locations (urban city/town centres), in consultation with UK experts on best practice models in place in the UK and internationally	CCMA	Q4 2018	RSA	Engineering
11 Expand funding to TII to cover anticipated costs for national road minor realignment schemes and pavement renewal of existing national road network in line with the targets set out in the government's <i>Road Safety Strategy 2013–2020</i>	DTTAS	Q4 2020	TII	Engineering
12 Recommendations in the 2016 Department of Health capacity report to be fully implemented insofar as they relate to emergency response times	DOH	Q4 2018	HSE	Evaluation data and research measures

Table 6 Low impact, less complex

Low impact/less complex		Lead agency	Completion date	Support agency	Category
13	Undertake a comprehensive study of killer behaviours, with particular emphasis on offenders and groups over-represented in road collisions	RSA	Q3 2018	N/A	Evaluation data and research measures
14	Identify the actions necessary to prepare for autonomous vehicles, and for this purpose establish a multi-disciplinary and multi-agency steering group to make recommendations	DTTAS	Q4 2018	Steering Group	Engineering
15	Publish monthly the figures for enforcement activity focusing on the killer behaviours: driving while intoxicated, speeding, seat belts, mobile phones	AGS	Monthly up to 2020	N/A	Enforcement
16	Monitor implementation and progress of strategy actions by scheduling meetings with the eight primary stakeholders every twelve weeks to ensure completion of all actions set out in the strategy	RSA	Up to 2020	All stakeholders	Evaluation data and research measures
17	Submit a statement of resources to include personnel requirements, finance, equipment and all other direct and indirect costs associated with the new actions assigned to each organisation	All lead stakeholders	Q4 2018	All stakeholders	Evaluation
18	Report on the number of serious injury collisions investigated by forensic collision investigators (FCIs) over the last 10 years for each road user group with a view to allowing the RSA access to these files for research purposes, to further our understanding of the contributory factors to serious injury collisions	AGS	Q2 2018	RSA	Evaluation

Table 7 Low impact, more complex

Low impact/more complex	Lead agency	Completion date	Support agency	Category
19 Develop and implement protocols with the relevant agencies to statistically match collision data with hospital data in order to produce serious injury figures in MAIS3+ format	RSA	Q3 2019	AGS, HSE, DPC, DG MOVE	Evaluation data and research measures
20 Conduct a review of the effectiveness of the graduated driver licensing (GDL) system, benchmarked against EU best practice, and make recommendations as necessary	RSA	Q4 2018	Approved Driving Instructor Stakeholder Forum	Education
21 Seek legal advice in relation to section 8 of the Road Safety Authority Act 2006 to establish if the RSA has the vires to access necessary information and statistics from other statutory agencies relating to road safety	DTTAS	Q4 2018	RSA, AGS, HSA	Evaluation data and research measures
22 Develop a protocol, underpinned by legislation, to allow the sharing of information and data, including personal data, between the HSA, An Garda Síochána and the RSA, to assist in the identification and investigation of non-compliance and non-adherence to statutory responsibilities in relation to vehicle maintenance, work-related vehicle safety and driving for work	HSA/RSA/AGS	Q3 2020	DTTAS	Enforcement

5.2 Behind Schedule Actions

The following are the 30 actions included in the strategy that have been reported by the lead stakeholder as being behind schedule. The stakeholders agree that the implementation of these actions remains relevant and will contribute to the objectives of the

strategy. These actions retain the number originally assigned and Table 8 provides revised **completion dates**, the **challenges to implementation** and the **proposed solutions** for each behind schedule action.

Table 8 Behind schedule actions

No. in Strategy 2013–2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
28	Develop and implement a specialist ADI category to deliver initial training for drivers of Category ‘BE’ vehicles with trailers over 750kg design gross weight (car and trailer)	RSA	Q3 2014	Q4 2018	Awaiting amendments to legislation	Legislation required to progress	ADI Forum
29	Develop and implement a programme for initial training for drivers of category ‘W’ vehicles (tractor)	RSA	Q4 2014	Q4 2018	RSA completed a draft consultation document at end 2016	RSA has recently submitted a draft consultation document to DTTAS setting out proposals for training of tractor drivers. This must be approved by DTTAS and then the consultation process commenced. It is likely that it will be Q1 2018 before any changes on foot of this measure are implemented	ADI Forum
32	Develop and implement a programme for the compulsory initial and ‘periodic’ training of driving instructors	RSA	Q4 2014	Q3 2019	Awaiting necessary legislation Formal approval of appropriately regulated training providers	Enact law Approve training providers	ADI Forum

No. in Strategy 2013-2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
33	Reduce long term reliance on multiple learner permits by introducing measures to ensure that learner permit holders sit a driving test before they can obtain a subsequent learner permit	RSA	Q1 2014	Q4 2018	Recruitment embargo impeded the recruitment of sufficient number of driver testers to ensure on-demand testing	Recruit and train additional driver testers Make it mandatory to sit a driving test before renewal of learner permit is granted Wait times for driving tests have increased so measures taken on this initiative must take account of the probability that an increase in driving test applications will further lengthen waiting times	ADI Forum
34	Develop a network of accredited specialist driver trainer/assessors to support medical fitness to drive clinical decision making	RSA	Q1 2014	Q4 2018	Identify appropriate training for personnel undertaking off-road driving assessments	RSA/NOTM working together to develop a code of practice that would voluntarily regulate the on-road driving assessment (ORDA) service	NOTM
41	Work with the Irish Insurance Federation (IIF) to promote compliance with learner permit regulations and rules relating to vehicle modifications. Run campaigns and utilise customer databases to ensure that every learner permit holder covered by an insurance policy receives specific insurance advice on learner permit regulations	RSA	Q2 2014	Q1 2018	No agreement as yet for additional information to be provided to drivers as part of their insurance documentation	RSA is now working through DTTAS to progress this measure as part of its broader engagement with insurance industry around the cost of insurance	IIF/individual insurance companies

No. in Strategy 2013–2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
43	Establish a Road Safety Working Together Group (RSWTG) in each Local Authority area to coordinate multi-agency road safety policy and implementation at a local level	CCMA	Q4 2013	Q3 2018	Not all local authorities have developed RSTWGs	CCMA to assist in and coordinate the development of RSTWGs in each local authority	RSA/AGS/HSE/TII
44	Each Local Authority RSWTG to publish a multi-agency Road Safety Action Plan and to publish an annual review on progress with implementation	CCMA	Annually	Annually from Q4 2018	Not all local authorities have developed road safety plans	Each RSTWG to develop a Road Safety Action Plan per local authority	RSA/AGS/HSE/TII
53	Carry out 150 minor realignment schemes on the national road network by 2020	TII	Q4 2020	Q4 2020	Lack of funding	Increased funding	Local Authorities
61	Increase from 84% to 90% the percentage of the national road network in which the pavement condition, as measured by annual survey indices, is characterised as fair or better	TII	Q4 2020	Q4 2020	Lack of funding	Increased funding	---
74	Report on the number of breath tests administered at mandatory alcohol testing checkpoints	AGS	Annually	Annually from Q4 2018	Unreliability of data in relation to MAT activities reported by AGS	Conduct review of MAT reporting and implement remedial actions highlighted by the review	MBRS
76	a. Report on the number of intoxicant impairment testing for drivers			a. Q4 2018	a. Ability to ensure the number of impairment tests conducted is recorded in a timely, accurate and verifiable manner.	a. AGS to review the current recording mechanism and the opportunity presented by the Garda Mobility Strategy to capture this information as required.	
	b. Report on the number of oral fluid tests conducted			b. Annually			

No. in Strategy 2013-2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
80	Enforce driver's hours and checking of operator licences in line with EU requirements checking an estimated 260,000 working days per annum in 2013 rising to 350,000 working days over the following 3 years	RSA/AGS	Q3 2018	Annually	Lack of timely and dissuasive enforcement tools, such as fixed penalties, which could be applied to both domestic and out-of-state operators alike is a challenge to successful delivery	Target high-risk operators Implementation of fixed charge notice scheme in 2018 Review of enforcement approach targeting serially non-compliant operators	---
83	Develop and implement an agreed effective roadside enforcement strategy for large commercial vehicles and drivers targeting roadworthiness, drivers' hours, tachograph and operator licensing, showing increases in the number of vehicles checked at roadside and report annually on progress in implementing the strategy	RSA/AGS	Q3 2013	Annually	Lack of timely and dissuasive enforcement tools for domestic and out-of-state operators alike is a challenge to successful delivery	New fixed charges Enforcement to target high-risk groups Review enforcement strategy based on data analysis	HSA/ Customs
87	Develop protocols for data sharing with other enforcement/statutory agencies with a view to sharing intelligence data where appropriate to inform enforcement activity	RSA	Q4 2013	Q4 2018	Restriction on data sharing across agencies	Seek legal advice in relation to section 8 of the Road Safety Authority Act 2006 to establish if the RSA has the viries to access necessary information and statistics, from other statutory agencies relating to road safety	AGS/HSA/ Customs/TII

No. in Strategy 2013–2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
93	Review the feasibility of alternative sanction options such as corrective training courses for commercial vehicle operators and drivers	RSA	Q3 2013	Q4 2018	Feasibility report not yet completed by consultants. This is to be finalised by Q4 2017	Consider what the legal requirements arising from the consultant's report are and if appropriate, legislate accordingly	DTTAS/AGS/DJE
94	Carry out a feasibility report on establishment of independent post-collision engineering assessment programme to review fatal and serious injury cases to include on-site engineering inspections	DTTAS	Q3 2013	Q2 2018	This action was temporarily downgraded in terms of work priorities and other demands. Further deliberations will be undertaken, and if required legal advice obtained prior to any necessary legislative measures introduced	Will be complete before end Q2 2017	TII/AGS/RSA/CCMA
97	Review Driver CPC Regulations to ensure the most effective enforcement measures are available	RSA	Q1 2014	Q3 2019	Driver CPC regulations require strengthening to ensure adequate oversight	Introduction of necessary supporting legislation	AGS/DTTAS
98	Review and make recommendations on the systems required to control and improve the standard of modifications to vehicles that are already in service (post registration modification scheme)	RSA	Q1 2014	Q4 2018	Pilot scheme to better control M1 and N1 modifications to be progressed Dependant on commitment of external stakeholders such as Revenue, Motor Tax and NSAI	Recommendation, following assessment, is that safety critical modifications are carried out by manufacturers/ authorised agents/distributors through their controlled processes and that the original vehicle design performance remains intact	Stakeholders

No. in Strategy 2013-2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
101	Implement a process for detention, storage, disposal and sale of vehicles impounded during roadside inspections involving RSA personnel in conjunction with An Garda Síochána	RSA	Q4 2013	Q2 2018	Legal provisions remain to be finalised	Expand to ensure transport officer's power to impound with new legal basis in Road Transport Acts	
107	Legislate for, subject to legal advice, and implement rehabilitation and driving awareness courses as court-based sentencing options for specific offenders	DTTAS	Q1 2015	Q3 2019	If legal advice indicates that courses such as these are feasible, complex legislation will be required, and the entire fixed charge systems will need to be reconfigured to allow for this	Following receipt of legal advice, if appropriate, legislate for such sentencing options	RSA/DJE
109	Consider the introduction of new legislation to prohibit high risk activities including on road marketing, vending and charitable collections	DTTAS	Q4 2014	Q3 2019	This action was downgraded due to other work priorities, and will require primary legislation to be enacted	Introduce legislation to prohibit this activity	RSA/HSA/AGS
116	Establish the definition of serious injuries to be used in the collection of serious injury data and the setting of a target for a reduction in serious injuries (The first half of this action is complete, text in bold is behind schedule)	RSA	Q4 2013	Q1 2018	Development of approved process to match collision and hospital data, and produce new target in MAIS3+ format	Meet with stakeholders to agree new target on serious injuries Schedule series of meetings with AGS, HIU and RSA to discuss proposed approach and then revise submission to DPC respecting sensitivity of all parties	HSE/HSA/AGS/TII ESRI/DOH

No. in Strategy 2013–2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
121	Undertake a cost benefit analysis for the use of alcohol interlocks as a sanction for repeat offenders	RSA	Q1 2014	Q1 2018	Complex study. Lack of up-to-date information on (a) cost of alcohol interlock programmes and (b) incidence of recidivist drink-driving in fatal and serious injury collisions	Meeting is required with support agencies to address information gaps Assistance required from EFEU in DTTAS to validate approach to undertake cost benefit analysis	AGS/MBRS/DJE
122	Conduct a review of maximum driving times for professional drivers not subject to tachograph rules to determine road collision risk and make recommendations	RSA	Q2 2014	Q3 2018	Report not yet completed by consultants	Implement recommendations of the report once received	AGS
123	Research and publish a report on the economic costs that arise as a result of the congestion/disruption to traffic consequent to road collisions	RSA	Q4 2015	Q1 2018	Complex study. Best approach undetermined, no international precedent	Meeting is required with all support agencies to brainstorm the best approach and share relevant data	DTTAS/TII/AGS/CCMA
127	Produce estimates of road safety related expenditure to inform the annual Road Safety Strategy Report	RSA	Annually	Annually	Insufficient information received from stakeholders	RSA to develop new template for collecting financial information in collaboration with stakeholders Meetings to be held to explain rationale for completion	AGS/LAs/DES/TII/DTTAS

No. in Strategy 2013-2020	Action	Lead agency or department	Original completion date	Revised completion date	Challenges	Solutions	Support agency or department
137	Develop more effective means to measure risk exposure data for road safety especially in the area of vehicle/kilo-metres travelled	RSA	Q3 2015	Q2 2018	Cannot obtain definitive measure of VKT for all road users VRU risk exposure – no framework in place	RSA to participate in IRTAD working group Stakeholder workshop to agree approach and share data Appoint international chair to advise on appropriate methods	TII
138	Work with the Irish Insurance Federation/ individual insurance providers and Motor Insurance Bureau of Ireland (MIBI) to enable further research and a greater understanding of collision causation and other contributing variables	RSA	Q1 2014	Annually up to 2020	Obtain appropriate data from insurance companies to improve data on collision causation	Further engagement from Insurance Ireland is required	DTTAS/ Insurance Ireland/ individual insurance providers/ MIBI
144	Work with the Irish Insurance Federation/ Irish Health Care Insurers to secure better access to road safety data and information on minor and serious injuries	RSA	Q4 2013	Annually up to 2020	Refer to Action 138		DTTAS/ Insurance Ireland

5.3 Critical Success Factors

The government's *Road Safety Strategy 2013–2020* identifies a number of critical success factors. The mid-term evaluation has identified that these factors as enunciated in the original strategy remain relevant. The following are some of the critical success factors included in the strategy.

5.3.1 Collaboration

Successful delivery of the strategy requires high level collaboration among key strategy stakeholders, a clear delineation of roles, and a framework that facilitates this collaborative approach. The mid-term evaluation has identified the need for more frequent reviews/meetings between key strategy stakeholders to ensure implementation of strategy actions and monitor progress.

5.3.2 Garda road policing

High level, visible and targeted roads policing is vital to achieve increased compliance with road traffic law and is the most important element in the strategy. Therefore An Garda Síochána needs to be provided with the necessary resources (financial, human resources and ICT) to ensure enforcement rates can be maintained at a high level. Road users in general need to believe that if they break road safety laws there is a good chance they will be apprehended, and for those who deliberately and repeatedly violate the law they need to be apprehended and receive the appropriate sanction.

5.3.3 Road engineering

The ongoing maintenance of the road network and the elimination of high-risk locations is vital to the success of the strategy. In the lifetime of this strategy this has been a particular challenge

due to underinvestment. The construction of new road building projects and the repair/maintenance of the existing network needs to be prioritised as a matter of urgency.

5.3.4 Media support

The support of the mass media (print, broadcast, electronic and social) is critical to ensure that road safety remains high on the public agenda of social issues in society. The media also plays a vital role in communicating important road safety messages to the public and high-risk groups in society.

5.3.5 Legislation

Important road safety initiatives need to be underpinned by road traffic laws. However, road safety laws are frequently subject to legal challenge. Therefore legislation needs to be developed carefully to ensure they are robust to withstand challenges. As the strategy unfolds, the introduction of necessary legislation to support the introduction of new road safety actions will be crucial to its success.

5.3.6 Funding

The provision of the required funding to support the implementation of actions in the strategy is vital. This means ensuring agencies are properly funded and resourced to achieve their respective actions. The recession has negatively impacted on the allocation of funding to agencies, in particular Transport Infrastructure Ireland (TII)/County and City Management Association (CCMA) and An Garda Síochána, and this has slowed progress in making our roads safer.

5.4 Monitoring Implementation

Critical to the success of the government's *Road Safety Strategy 2013–2020*, and to the advances made to date, is the high level monitoring by the Ministerial Committee on Road Safety. The committee's involvement is instrumental in ensuring that strategy stakeholders make every effort to implement actions by the designated dates provided. The continued participation of all relevant ministers and the attorney general in the committee remains key to a successful outcome. In recent years, the committee has met twice yearly. For the remaining period of the current strategy, more regular meetings may be required to oversee implementation and to react quickly to issues arising.

Other existing arrangements, such as the quarterly stakeholder strategy reports for monitoring progress, have proven successful

and will continue.

The success of the strategy, beyond implementation of the actions, will be determined by the level of cooperation and collaboration between all of the strategy stakeholders involved. The RSA will liaise closely with all strategy stakeholders and will act as facilitator, where required, for discussion between these bodies. As outlined in new Action 16 above, meetings between the eight key primary stakeholders will take place every twelve weeks to ensure implementation of actions to monitor progress. A formal reporting procedure to keep the Board of the RSA apprised of the implementation of the strategy will be put in place.

6.

Appendices

Appendix A Report on Progress of Implementation – Road Safety Strategy 2013–2020

Completed
On schedule
Behind schedule

Table 10 Progress of implementation as of November 2016

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
1	Implement public education/awareness campaigns which target the main causal factors for collisions, deaths and serious injuries for all road users but in particular the high risk groups	RSA	Annually	Completed
2	Integrate public education/awareness campaigns with the policing plans of An Garda Síochána	RSA	Annually	Completed
3	Apply new media techniques/initiatives to road safety awareness/education campaigns which are interactive and age-appropriate including the development of a social media strategy	RSA	Annually	Completed
4	Conduct a public education/awareness campaign to improve road users' understanding of how and why speed limits are set	RSA	Q4 2014	Completed
5	Conduct an education/awareness campaign on the use of seat belts on school bus transport	RSA	Q3 2013	Completed
6	Conduct a public awareness campaign on EURO NCAP ratings designed to focus awareness on each vehicle's safety features to assist the public when purchasing a car	RSA	Q3 2014	Completed
7	Update the suite of publications on the collision causing factors (speed, impaired driving, seatbelt wearing and vulnerable road users) aimed at all road-users to complement the Rules of the Road and the Driver Theory Test	RSA	Annually	Completed
8	Implement specific educational measures aimed at vulnerable road users. In particular: • safe crossing by pedestrians • awareness of intoxicated pedestrians • use of personal protection equipment for cyclists and motorcyclists • awareness of blind spots on HCVs • road users and workers at road works • care for young and older people. Promote the voluntary use of high visibility material for pedestrians, cyclists & motorcyclists	RSA	Annually	Completed
9	Develop and implement education/awareness interventions aimed at the high risk 17 to 24 year age group	RSA	Annually	Completed
10	Monitor the implementation of guidelines to assist advertisers to depict positive images of safe driving behaviour and avoid showing unsafe road behaviour	RSA	Annually	Completed
11	Develop a Code of Practice to inform retailers and parents on the appropriate and correct fitment of child restraints in line with legal requirements and best practice	RSA	Q4 2013/ongoing	Completed
12	Update the education/awareness programme on the dangers of fatigue to include sleep disorders such as Obstructive Sleep Apnoea Syndrome (OSAS)	RSA	Annually	Completed

Completed

On schedule

Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
13	Ensure that education/awareness materials are readily accessible to the road-using public via internet and in hard copy through a minimum of 500 public buildings across the country	RSA	Q2 2014	Completed
14	Develop, disseminate and implement national medical fitness to drive guidelines for medical practitioners for Group 1 and 2 drivers	RSA/NPOTM	Q1 2013 Group 1 Drivers Q3 2013 Group 2 Drivers	Completed
15	Integrate international road safety awareness events such as UN Global Road Safety Awareness Week, EU Road Safety Day and World Day of Remembrance for Road Traffic Victims into road safety plans nationally and at local level	RSA	Annually	On schedule
16	Host annual road safety awards ceremony recognising ‘Leading Lights’ in road safety	RSA	Annually	Completed
17	Undertake an annual Road Safety Back to School Campaign highlighting important road safety messages and enhancing the safety of school going children at the start of each academic year	RSA	Annually/ ongoing	Completed
18	Organise an annual Irish Road Safety Week with a series of local and national co-ordinated events aimed at raising awareness of road safety	RSA	Annually	Completed
19	Promote joint North/South cooperation on road safety awareness campaigns and jointly run campaigns where appropriate	RSA	Annually	On schedule
20	Implement a comprehensive integrated road safety education programme, co branded with An Garda Síochána for Pre-school, Primary, Post-Primary, Third Level, Community and Further Education programmes	RSA/AGS	Q2 2014/ ongoing	On schedule
21	Review all primary and secondary road safety educational resources and continue such road safety education as a component of the primary and secondary level syllabus where opportunities arise and when syllabi are reviewed	RSA	Annually/ ongoing	On schedule
22	Implement a regional structure led by a Road Safety Officer to lead the delivery of road safety education and awareness programmes at a local level in each local authority area	RSA	Q1 2014	Completed
23	Update the Streetwise Programme to reflect changes made to the Junior Cycle Syllabus and include first aid at the scene of a collision as a component of the new Junior Certificate Programme	RSA	Q1 2015/ ongoing	On schedule
24	Develop and implement public education/awareness actions aimed at minority/disadvantaged groups in the community	RSA	Q1 2015/ ongoing	On schedule
25	Promote the implementation of the ‘Lets Go’ Road Safety Guidelines for Primary and Secondary schools	RSA	Annually/ ongoing	Completed

Completed
On schedule
Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
26	Develop a standardised guide to reducing road safety school gate risks and implement nationally	RSA	Q4 2014	On schedule
27	Encourage organisations to sign up and be committed to the European Road Safety Charter and report on their actions/outcomes annually	RSA	Annually/ ongoing	On schedule
28	Develop and implement a specialist ADI category to deliver initial training for drivers of Category ‘BE’ vehicles with trailers over 750 kg design gross weight (car and trailer)	RSA	Q3 2014	Behind schedule
29	Develop and implement a programme for initial training for drivers of category ‘W’ vehicles (tractor)	RSA	Q4 2014	Behind schedule
30	Introduce road safety awareness campaigns that promote Personal Protection Equipment (PPE) for vulnerable road users (pedestrians, motorcyclists and cyclists), and which support modal shift to healthier forms of mobility such as walking and cycling	RSA	Annually	Completed
31	Develop a standardised road safety cycling training proficiency programme for children and seek to make this programme available to as many schools as possible	DTTAS/RSA	Q3 2014/ ongoing	On schedule
32	Develop and implement a programme for the compulsory initial and ‘periodic’ training of driving instructors	RSA	Q4 2014	Behind schedule
33	Reduce long term reliance on multiple learner permits by introducing measures to ensure that learner permit holders sit a driving test before they can obtain a subsequent learner permit	RSA	Q1 2014	Behind schedule
34	Develop a network of accredited specialist driver trainer/assessors to support medical fitness to drive clinical decision making	RSA	Q1 2014	Behind schedule
35	Introduce education awareness raising campaigns on the dangers of in-car, driver distraction, in particular the use of hands-free mobile phones	RSA	Annually	Completed
36	Develop an Emergency Services Driving Standards & Syllabus for front line personnel required to drive emergency vehicles	RSA	Q4 2013	Completed
37	Develop, introduce and oversee the implementation of a driving standard, training syllabus and assessment process for emergency service drivers. Maintain a Register of qualified drivers	RSA	Q1 2015	Completed
38	Review, update and expand the GDL programme to include new requirements to enhance skill progression for learner, novice drivers and consider the inclusion of other driver categories for post test training/ experience during the N plate phase	RSA	Q4 2015/ ongoing	Completed
39	Work with the Irish Tyre Industry Association (ITIA) to educate drivers about tyre safety, maintenance and checking. Run two national campaigns jointly per annum	RSA	Annually	Completed

Completed
On schedule
Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
40	Work with the Society of the Irish Motor Industry (SIMI) to educate drivers about the importance of maintaining vehicles in a roadworthy condition and in preparation for adverse weather conditions. Run two national campaigns jointly per annum	RSA	Annually	On schedule
41	Work with the Irish Insurance Federation (IIF) to promote compliance with learner permit regulations and rules relating to vehicle modifications. Run campaigns and utilise customer databases to ensure that every learner permit holder covered by an insurance policy receives specific insurance advice on learner permit regulations	RSA	Q2 2014/ ongoing	Behind schedule
42	Work with the Car Rental Council of Ireland to promote road safety to tourists and visitors to Ireland who use hire vehicles. • Ensure that every vehicle hired contains basic road safety materials. • Ensure that all car hire websites provide road safety information/links to Irish road safety sites	RSA	Q2 2014	Completed
43	Establish a Road Safety Working Together Group (RSWTG) in each Local Authority area to co-ordinate multi-agency road safety policy and implementation at a local level	CCMA	Q4 2013	Behind schedule
44	Each Local Authority RSWTG to publish a multi-agency Road Safety Action Plan and to publish an annual review on progress with implementation	CCMA	Annually	Behind schedule
45	Ensure that all employers are aware of the legal requirement to notify the HSA of relevant collisions involving a road user in the course of their employment and publish data on collision volumes and reporting compliance	HSA	Q2 2013	Completed
46	Report and publish annual data on workplace road collisions, deaths and injuries to Eurostat	HSA	Annually	Completed
47	Develop a national programme (education/enforcement) for load securing to influence improved standards of load safety in the workplace and on the road	HSA	Q1 2014	Completed
48	Work with victim advocacy groups to inform the development and implementation of support advisory information/counselling for families affected by road fatalities and serious injuries	RSA	Q1 2015	Completed
49	Work with Iarnród Éireann and the Railway Safety Commission to educate road users on the correct use of railway level crossings by conducting awareness campaigns on an annual basis, updating the ROTR publication and collaborating on other joint safety initiatives	RSA/Iarnród Éireann	Q4 2013/ annually	Completed
50	Work with and educate Fleet Management Companies and procurers of fleet vehicles to ensure that vehicle safety (NCAP) ratings are given consideration when choosing and purchasing vehicles	RSA	Q1 2015/ ongoing	On schedule

Completed

On schedule

Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
51	Work with public and private organisations to ensure that road safety is a key determinant in specification for services and tender documents when considering the procurement of goods and services	RSA	Annually/ongoing	On schedule
52	Extend measures in the EU Road Infrastructure Safety Management Directive 2008/96/EC relating to road safety inspection and traffic management, which currently apply to the Ten-T routes, to the entire national road network by 2016	TII	Q4 2016	Completed
53	Carry out 150 minor realignment schemes on the national road network by 2020	TII	Q4 2020	Behind schedule
54	Implement safety schemes at high risk locations on regional and local roads	LA's	Annually/ongoing	On schedule
55	Develop design guidelines for forgiving roadsides	TII	Q4 2013	Completed
56	The provision of at least 5 new service areas on or immediately adjacent to the motorway network by 2020	TII	2020	Completed
57	Report on the number of designated and equipped enforcement check-point sites for commercial vehicles and their drivers for inclusion in the annual Road Safety Strategy Report to the Minister of Transport, Tourism and Sport	RSA	Q4 2014/ongoing	On schedule
58	Each Local Authority to publish/renew their prioritised plan on road building construction and maintenance on an annual basis	LA's/CCMA	Annually/ongoing	On schedule
59	Review road worthiness testing of vintage vehicles to determine the safety case and cost benefits if any for inclusion in roadworthiness testing	RSA	Q1 2015	Completed
60	Increase from 88% to 95% the percentage of national road pavement that is measured as above Investigatory Level in the annual skid resistance (SCRIM) surveys	TII	Q3 2019/ongoing	On schedule
61	Increase from 84% to 90% the percentage of the national road network in which the pavement condition, as measured by annual survey indices, is characterised as fair or better	TII	Q1 2020	Behind schedule
62	Review the legislation to control the re-introduction of written off vehicles which are no longer suitable for use on public roads and to control the repair and re-use of vehicles written off for financial purposes	DTTAS	Q1 2014	Completed
63	Improve the standard of agricultural vehicles on our roads by implementing the recommendations of the 2008 review of the use of agricultural vehicles on public roads	DTTAS	Q4 2013	Completed
64	Research emerging 'in-road' and 'in-vehicle' road safety technologies and make recommendations on their introduction	RSA	Annually/ongoing	On schedule
65	Reduce the number of access points outside speed limit areas on national roads by 5% by 2020	TII	Q1 2020	Completed

Completed

On schedule

Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
66	Review and make recommendations in relation to the standard of the vehicle service industry, in particular in relation to vehicle maintenance and repairs and the supply and fitment of components and market surveillance requirements	RSA	Q4 2015/ ongoing	Completed
67	Implement measures to ensure timely and parallel implementation of the eCall service by the three involved stakeholder groups (automotive industry, mobile network operators and public emergency services), in line with forthcoming EU regulations	DTTAS	Q4 2015	On schedule
68	Review and determine the most appropriate method of making vehicle odometer reading history available to the public to prevent odometer fraud (clocking) thereby protecting consumers and providing more accurate data on vehicle servicing and replacement of safety critical components	RSA	Q4 2015/ ongoing	Completed
69	Publish and implement an annual Garda Roads Policing Operation Plan	AGS	Annually	Completed
70	Carry out targeted operations of traffic law enforcement with a particular emphasis on safety offences. These priority offences are:• Excessive and inappropriate speeding • Impaired driving (alcohol and drugs)• Restraint/helmet use• Mobile phone use. Other offences will be targeted as a result of evidence-based policing and research	AGS	Annually	Completed
71	Maintain a Garda Traffic Corps structure and report annually on the number of Gardaí signed to the Corps	AGS	Annually	Completed
72	Continue with the outsourcing of the operation of safety cameras to produce 6,000 hours of enforcement per month up to the end of 2015	AGS	Q4 2015	Completed
73	Review the effectiveness of the outsourcing of the operation of safety cameras and establish if there is a business case to continue with outsourcing beyond 2015	AGS	Q1 2014	Completed
74	Report on the number of breath tests administered at mandatory alcohol testing checkpoints	AGS	Annually	Behind schedule
75	Legislate for and implement intoxicant impairment testing for drivers	DTTAS	Q4 2014	Completed
76	Report on the number of intoxicant impairment tests administered	AGS	Annually	Behind Schedule
77	Legislate for the introduction of zero tolerance approach for illicit drug driving and impairment approach for other drugs	DTTAS	Q2 2015	On schedule
78	Legislate for the implementation of chemical roadside testing for drugs	DTTAS/MBRS	Q2 2015	On schedule
79	Carry out a feasibility study on the introduction of a rectification notice scheme for defective vehicles targeting common faults such as lights, insufficient tread depth on tyres, broken mirrors, etc. that would require prompt repair of any defects	DTTAS	Q2 2014	Completed

Completed
On schedule
Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
80	Enforce driver's hours and checking of operator licences in line with EU requirements checking an estimated 260,000 working days per annum in 2013 rising to 350,000 working days over the following 3 years	AGS/RSA	Q4 2016	Behind schedule
81	Assess the effectiveness of introducing targeted checks of roadworthiness of light goods vehicles at roadside HCV checkpoints	AGS/RSA	Q3 2014	Completed
82	Implement and enforce new maintenance obligations for commercial vehicle operators including an annual self-declaration for operators of large commercial vehicles	RSA	Q3 2014/ ongoing	On schedule
83	Develop and implement an agreed effective roadside enforcement strategy for large commercial vehicles and drivers targeting roadworthiness, drivers' hours, tachograph and operator licensing showing increases in the number of vehicles checked at roadside and report annually on progress in implementing the strategy	AGS/RSA	Q3 2014	Behind schedule
84	Implement a targeted risk-based approach to enforcement of drivers' hours and roadworthiness offences related to HCVs which would target enforcement at less compliant drivers and operators and support compliant drivers and operators by minimising disruption to them as they go about their daily business	AGS/RSA	Q1 2014/ ongoing	On schedule
85	Review and update the penalty point system to ensure relevant sanctions are in place, amended as required and new sanctions are introduced to cover new and emerging road safety issues with particular relevance to drivers and vulnerable road users	DTTAS	Q4 2014	Completed
86	Establish a new system for risk rating compliance which will incorporate commercial vehicle roadworthiness testing into the risk rating system as set out in the RSA (Commercial Vehicle Roadworthiness) Act 2012 and support the achievement of Action 84	RSA	Q3 2013/ ongoing	On schedule
87	Develop protocols for data sharing with other enforcement/statutory agencies with a view to sharing intelligence data where appropriate to inform enforcement activity	RSA	Q4 2013	Behind schedule
88	Review policy on licensing of road transport operators to assess if own account operators should be included	DTTAS	Q3 2014	On schedule
89	Conduct a feasibility study into integrating collision related data into the commercial vehicle enforcement risk rating system	RSA	Q4 2013	On schedule
90	Publish the Speed Limits Review report and implement its recommendations	DTTAS	Q4 2014	Completed
91	Legislate for, subject to legal advice, and implement the use of average speed cameras at appropriate locations including the Dublin Port Tunnel and at road works	DTTAS	Q2 2014	Completed
92	Legislate for the extension of fixed charge notices to other offences including those related to cyclists and drivers' hours	DTTAS	Q2 2014	Completed

Completed

On schedule

Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
93	Review the feasibility of alternative sanction options such as corrective training courses for commercial vehicle operators and drivers	RSA	Q3 2013/ongoing	Behind schedule
94	Carry out a feasibility report on establishment of independent post-collision engineering assessment programme to review fatal and serious injury cases to include on-site engineering inspections	DTTAS	Q3 2013	Behind schedule
95	Legislate for the expansion of RSA Enforcement Officer statutory powers to allow for Driver CPC requirements to be enforced as part of roadside checks	DTTAS	Q1 2014	On schedule
96	Develop guidelines for organisations and strengthen the permitting system to ensure that all aspects of road safety are considered when organising public events on Irish roads	RSA	Q4 2013	On schedule
97	Review Driver CPC Regulations to ensure the most effective enforcement measures are available	RSA	Q1 2014	Behind schedule
98	Review and make recommendations on the systems required to control and improve the standard of modifications to vehicles that are already in service (post registration modification scheme)	RSA	Q1 2014/ongoing	Behind schedule
99	Review the options for ensuring that the quality of work carried out by vehicle maintenance and repair services is of a consistent minimum standard so that vehicle owners and the general public can be assured that the vehicles in use on our roads comply with the minimum legal and safety standards	RSA	Q1 2015/ongoing	Completed
100	Conduct a review of current roads network to support extension of the centralised permit system to include overweight vehicles/loads and vehicles/loads over 4.3 m in width and 27.4 m in length	TII	Q3 2013	Completed
101	Implement a process for detention, storage, disposal and sale of vehicles impounded during roadside inspections involving RSA personnel in conjunction with An Garda Síochána	RSA/AGS	Q4 2013	Behind schedule
102	Integrate NCT and Commercial Vehicle Roadworthiness Test data into the An Garda Síochána ITS system	RSA/AGS	Q2 2014/ongoing	On schedule
103	Promote the greater use of the An Garda Síochána Traffic Watch scheme	AGS	Annually	Completed
104	Undertake education/awareness raising and roadside checks to ensure that trailers comply with the road traffic and type approval legislation	RSA/AGS	Annually/ongoing	On schedule
105	Make it compulsory for a breakdown emergency pack including a first aid kit, a high visibility vest, a breakdown triangle and a torch to be carried in all vehicles by end 2014	DTTAS	Q4 2014	On schedule
106	Legislate, subject to legal advice, to prevent persons over the legal blood alcohol limit from acting as an accompanying driver for a Learner Permit holder	DTTAS	Q3 2016	Completed

Completed

On schedule

Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
107	Legislate for, subject to legal advice, and implement rehabilitation and driving awareness courses as court-based sentencing options for specific offenders	DTTAS	Q1 2015	Behind schedule
108	Undertake further cross-border enforcement actions in co-operation with Northern Ireland in relation to commercial vehicles and drivers	RSA/AGS	Annually/ongoing	On schedule
109	Consider the introduction of new legislation to prohibit high risk activities including on road marketing, vending and charitable collections	DTTAS	Q4 2014	Behind schedule
110	Report to the Minister of Transport, Tourism and Sport annually on the progress in implementing the Strategy	RSA	Annually/ongoing	On schedule
111	Maintain the Ministerial Committee on Road Safety to monitor progress on the implementation of the Road Safety Strategy 2013–2020	DTTAS	Annually	Completed
112	Conduct a Mid Term Evaluation of the Road Safety Strategy 2013–2020 in 2016, incorporating a review of the Strategy targets and actions	RSA	Q4 2016/ongoing	On schedule
113	Commence an Ex-post Evaluation of the Road Safety Strategy 2013–2020	RSA	Q2 2020/ongoing	On schedule
114	Undertake annual surveys of speed, seatbelt usage and other road user behaviours and publish findings each year	RSA	Annually	Completed
115	Review format and content of annual Road Collision Fact publication and promote greater uptake and utilisation of this data	RSA	Q3 2015	Completed
116	Establish the definition of serious injuries to be used in the collection of serious injury data and the setting of a target for a reduction in serious injuries	RSA	Q4 2013	Behind schedule
117	Collect data on serious injuries in the context of the National Health and Welfare Survey	DoH/RSA	Q1 2014/ongoing	On schedule
118	Improve the recording, collection and dissemination of road collision data, including the enhanced use of the Pulse System	RSA/AGS	Q1 2014	Completed
119	Provide data on the number of fatalities where the deceased had a positive toxicology for alcohol or drugs	RSA	Annually	Completed
120	Carry out a feasibility study to extend the remit of the National Drug-Related Death Index to collect all data on fatalities from coroner files	RSA	Q3 2013	Completed
121	Undertake a cost benefit analysis for the use of alcohol interlocks as a sanction for repeat offenders	RSA	Q1 2014/ongoing	Behind schedule
122	Conduct a review of maximum driving times for professional drivers not subject to tachograph rules to determine road collision risk and make recommendations	RSA	Q2 2014/ongoing	Behind schedule
123	Research and publish a report on the economic costs that arise as a result of the congestion/disruption to traffic consequent to road collisions	RSA	Q4 2015/ongoing	Behind schedule

Completed
On schedule
Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
124	Evaluate on an ongoing basis the use of roadside drug screening devices	MBRS	Annually/ongoing	On schedule
125	Develop a strategy for road safety research at third level institutions to include research to support monitoring and evaluation of the Strategy	RSA	Q4 2014	Completed
126	Explore the potential for a third level qualification in road safety	RSA	Q2 2015/ongoing	On schedule
127	Produce estimates of road safety related expenditure to inform the annual Road Safety Strategy Report	RSA	Annually/ongoing	Behind schedule
128	Implement a research programme that supports enforcement efforts and measures the benefits of the commercial vehicle roadworthiness reform programme (attitudinal surveys, annual surveys, etc.)	RSA	Q2 2016/ongoing	On schedule
129	Establish a technology assessment panel to evaluate new and emerging road safety related technologies and advise on how appropriate technology can be implemented in Ireland	RSA	Q3 2015/ongoing	On schedule
130	Host an annual international conference on road safety to update and review best practice developments	RSA	Annually	Completed
131	Host an annual academic lecture targeting a specific cohort of expertise that reflect topical issues on best practice road safety and that informs future road safety policies	RSA	Annually/ongoing	Completed
132	Participate in the European International road safety research programmes – IRTAD, ETSC, CARE, CEDR and FERSI	RSA/TII	Annually/ongoing	Completed
133	Implement Prüm and EUCARIS16 Directives to support the effective exchange of information relating to vehicle and driver infringements between Member States	DTTAS	Q2 2014	Completed
134	Evaluate the cost benefit of reducing VAT from Personal Protective Equipment (PPE) including child restraints, motorcycle and cyclist PPE with a view towards increasing usage of highest quality PPE and make recommendations to Department of Finance	RSA	Q1 2014/ongoing	Completed
135	Evaluate the cost benefit of incentivising the purchase of vehicle components/devices and personal protection equipment (PPE) that are proven to have positive road safety impact	RSA	Q2 2015/ongoing	On schedule
136	Evaluate the business case and benefits for the establishment of a National Trauma Registry and publish recommendations	DoH	Q4 2017/ongoing	On schedule
137	Develop more effective means to measure risk exposure data for road safety especially in the area of vehicle/kilometres travelled	RSA	Q3 2015	Behind schedule
138	Work with the Irish Insurance Federation/individual insurance providers and Motor Insurance Bureau of Ireland (MIBI) to enable further research and a greater understanding of collision causation and other contributing variables	RSA	Q1 2014	Behind schedule

Completed

On schedule

Behind schedule

Action #	Action	Responsibility	Due date	Classification – as of Nov 2016
139	Develop a professional qualification for RSA Road Safety Promotion Officers to enhance the quality and consistency of service to the public	RSA	Q1 2017/ongoing	On schedule
140	Report on the implementation of a target emergency response time for life threatening emergency calls in line with the HIQA recommendations of 8 minutes in 75% of all cases	DoH/HSE	Annually/ongoing	On schedule
141	Report on the implementation of a target emergency response time for life threatening emergency calls in line with the National Policy Document ‘Keeping Communities Safe – A Framework for Fire Safety in Ireland’	DECLG/ National Directorate for Fire and Emergency Management	Q1 2013	Completed
142	Support development of an evidenced based emergency care model for victims of crashes, including pre-hospital and hospital based care, that provides for a consistent appropriate emergency response which reflects best practice and which improves the survival, treatment and recovery of those involved	HSE/DECLG	Q4 2015/ongoing	On schedule
143	Identify potential philanthropic agencies/organisations with access to private funding that could further augment the road safety effort in Ireland and set funding targets to achieve this Private objective	RSA	Annually	Completed
144	Work with the Irish Insurance Federation/Irish Health Care Insurers to secure better access to road safety data and information on minor and serious injuries	RSA	Q4 2013	Behind schedule

Appendix B Contributory Factors to Collisions

An overview of the latest evidence relating to each of these killer behaviours has been set out in this appendix. Much of the most recent evidence comes from the RSA/An Garda Síochána pre-crash behaviour study, and a brief background to this study is described here.

Pre-crash behaviour study

In 2016, the RSA published a number of pre-crash behaviour reports produced following an analysis of An Garda Síochána fatal collision investigation files in order to identify the main contributory factors in fatal collisions. This analysis was based during the time period 2008 to 2012. During this time, there were 983 fatal collisions which occurred on Irish roads, claiming the lives of 1,077 people. The pre-crash reports examined 867 of the fatal collisions which occurred during this time period.

Impaired driving

Impaired driving incorporates a number of elements: driving under the influence of alcohol or drugs, driving while fatigued, and driving while distracted.

Alcohol: From the RSA's pre-crash behaviour study on 'Alcohol as a Factor in Fatal Collisions (2008–2012)' we know that alcohol was a contributory factor in 38% of all fatal collisions, claiming the lives of 286 people. Some 29% of all fatal collisions involved a driver or motorcyclist who had consumed alcohol, while 9% of all fatal collisions involved a pedestrian who had consumed alcohol. The study has also shown that 29% of motorcyclists involved in fatal collisions had consumed alcohol.

Furthermore, the RSA Driver Attitudes & Behaviour Survey has, during the last number of years, established that approximately one in ten drivers have admitted to driving after consuming alcohol.

Drugs: A review of road traffic collisions and drug and alcohol toxicology analysis from the coroner's district in Co Kildare during the period 1998–2009 showed that of the 92 driver deaths, 50% recorded a positive toxicology (alcohol and/or drugs) and 9.8% of these had a positive toxicology for a drug.

Furthermore, more recent data is available from the Health Research Board's analysis of 2013 and 2014 coroner data, on behalf of the RSA (in the context of the NDRDI, the National Drug Related Death Index).

Toxicology results¹⁴ showed that in 2013 22 (19%) of RTC fatalities were positive for illicit drugs. Twenty of these were drivers or motorcyclists, representing 24% of all drivers and motorcyclists included in the analysis. The results of toxicology tests revealed that almost one-third of fatalities, 34 (30%), tested positive for prescription drugs¹⁵. In 2014, toxicology results¹⁶ showed that 15 (11%) of RTC fatalities were positive for illicit drugs; 11 of these were drivers or motorcyclists, representing 15% of all drivers and motorcyclists included in the analysis.

Fatigue: The European Transport Safety Council (ETSC) states that driver fatigue is conservatively estimated to be a factor in about 20% of road crashes in Europe. In addition, UK research has indicated that driver fatigue could be a contributory factor in one in five fatal crashes in Ireland.¹⁷ Furthermore, the RSA's 2015 Driver Attitudes & Behaviour Survey has shown that one in ten motorists have fallen asleep at the wheel while driving.

Driver distraction: International evidence suggests that driver distraction is a contributory factor in up to 30% of all road collisions.¹⁸ Experts in this area state that distraction can be any one of three types: manual (hands off the wheel), visual (eyes off the road) or cognitive distraction (mind off the road). A distraction can be internal to or external to the vehicle, and a distracting event can encompass all three types of distraction, manual, cognitive and visual. Texting, for example, could potentially include all three types of distraction. In fact, mobile phone use while driving is deemed to be one of the most dangerous and common types of distraction. International evidence suggests that texting while driving makes a driver four times more likely to crash.

An observational study conducted by the RSA in 2016, based on observations of over 14,000 drivers around the country, showed that 6% of drivers were using a mobile phone, either texting or on a call, while driving.

Furthermore, a public attitude survey of 1,000 Irish drivers conducted by the RSA in 2015 revealed that 46% of Irish motorists are active at least sometimes with their mobile phone while driving. If we exclude talking on a hands-free mobile phone, which, incidentally, has not been proven to be safer than other types of mobile phone use, 10% of drivers admit to using a handheld phone while driving at least 'sometimes', 6% admit to texting while driving, and 3% admit to checking their apps while driving. Males are more likely to use their mobile phone while driving.

¹⁴ Having a positive toxicology does not confirm that the drug was implicated in the death; this analysis does not report on whether drug levels were within the therapeutic range or not.

¹⁵ See note 14 above.

¹⁶ See note 14 above.

¹⁷ Professor Jim Horne, Head of the Sleep Research Laboratory, Loughborough University, UK.

¹⁸ Regan, M., Lee, J., & Young, K. (2008). *Driver Distraction: Theory, Effects, and Mitigation*. CRC Press.

In 2015, 30% of motorists considered mobile phone use to be broadly 'acceptable' when stopped at a traffic light, and it is clear that drivers use various techniques to rationalise mobile phone use while driving.

Speed

From the pre-crash behaviour study cited above, 32% of fatal collisions during the period 2008–2012 were identified as having excessive speed for the road and conditions as a contributory factor to the collision. In total, 322 people died as a result of a collision where excessive speed was cited as a main contributory factor.

The most recent RSA observational study of drivers' free speed conducted in September/October 2016 indicated that over half of car drivers (57%) exceeded the posted speed limit on urban roads (roads with a speed limit of 60 km/h or less) and just over one in five (22%) car drivers broke the speed limit on rural roads (roads with a posted speed limit of more than 60 km/h). (Note: free speed is defined as the speed at which drivers choose to travel when unconstrained by road geometry (e.g. sharp bends, intersections or hills), weather conditions (e.g. rain) or traffic conditions (e.g. congestion).)

In addition, from the RSA's 2015 Driver Attitudes & Behaviour Survey, a face-to-face in-home survey of over 1,000 motorists, it has been established that between 44% and 54% of motorists consider low-level speeding (i.e. exceeding the speed limit by less than 10 km/h) as broadly acceptable, while a smaller proportion, between 16% and 23%, consider exceeding the posted speed limit by more than 10 km/h to be acceptable.

Non-wearing of seat belts

Approximately one in five drivers and passengers killed on the roads in recent years were not wearing a seat belt at the time of the collision: 22% in 2016, 29% in 2015 and 19% in 2014. Furthermore, the pre-crash behaviour study shows a correlation between drink-driving and non-seat belt wearing. Of the 867 fatal collisions analysed, 196 drivers were recorded as not wearing a seat belt at the time of the collision, and 57% of these had consumed alcohol prior to the collision.

RSA observational studies of drivers show a high level of compliance (94% in 2015). Passengers show a lower level of compliance (89%) based on the 2015 survey, in particular rear seat passengers (81%). The government's *Road Safety Strategy 2013–2020* has set a target of 100% compliance for seat belt wearing and this target remains relevant.

Unsafe behaviour by/toward vulnerable road users

The extent to which drivers engage in speeding in urban areas poses a significant threat to the safety of vulnerable road users, in particular cyclists, pedestrians, children and older people.

The RSA's *Pre-Crash Report on Motorcyclists* in fatal collisions found that speed was a contributory factor in 49% of the 93 fatal collisions involving a motorcyclist; 29% of the motorcyclists involved in the 93 fatal collisions had consumed alcohol.

Pedestrians are typically most vulnerable in the winter months and in the darker hours of the day. Among pedestrians killed in recent years, garda reports have shown that only a small number were confirmed as wearing high visibility clothing at the time of the collision. Crossing the road has been confirmed as one of the main contributory actions to fatal collisions involving pedestrians.

The relationship between speed and injury severity is particularly critical for vulnerable road users such as pedestrians and cyclists. For example, pedestrians have been shown to have a 90% chance of survival when struck by a car travelling at 30 km/h or below, but less than 50% chance of surviving an impact at 45 km/h. Pedestrians have almost no chance of surviving an impact at 80 km/h.¹⁹

Other contributory factors

Defective vehicles: From the 2008–2012 pre-crash behaviour study it has been established that defective vehicles contributed to 14% of fatal collisions, with defective tyres featuring most strongly (9%).

19 World Health Organisation, 2004. *World Report on Road Traffic Injury Prevention*.

Appendix C Serious Injuries

Medical Definition of Serious Injuries: MAIS 3+

In March 2013, the High Level Group of the European Commission (EC) requested that all EU countries improve on reporting of serious injuries. A common medical definition was agreed: MAIS3+ (Maximum Abbreviated Injury Scale). The European Commission formally requested that all member states put procedures in place to address the issue of under-reporting of serious injuries by reporting on serious injuries using a medical definition and also to allow for comparability across EU countries. For Ireland, and many other countries, to report on the number of road collision injuries using the MAIS system requires that a number of transformations be applied to existing medical data. The end point of this process is to translate medical diagnoses, currently provided in Ireland using a system called ICD-10 AM, into a MAIS score.

The EU, through the CARE expert group, has provided countries with a system of translating the data. The original Abbreviated Injury Severity Scale (AIS) system, from which MAIS is derived, was developed by the American Medical Society (AMA), the Society of Automotive Engineers (SAE) and the Association for the Advancement of Automotive Medicine (AAAM). At the EU's request, they have produced the algorithm, which is proprietary information, for use by member states in this project.

Ireland's Current Position

Long-term aim

A feasibility study, conducted in 2014, concluded that it will be possible for Ireland to comply with the EU requirement to match these two datasets to improve injury reporting. However, a key challenge of this matching exercise is the fact that neither the Garda Pulse system nor HIPE (hospital in-patient enquiry) has a common unique identifier (such as a PPS number).

Arising from this challenge, a number of issues need to be addressed. The first is to gain access to common variables, such as a person's name, to improve the matching process. The second is the identification of an independent third party to conduct the matching; this third party organisation should have protocols in place to allow the safeguard of sensitive information. The third issue is to address satisfactorily the data protection concerns which would be partly met by using an independent party.

The RSA submitted a formal proposal to the Data Protection Commissioner (DPC) in 2014 to seek approval for the proposed plan of work to statistically match the two datasets. At the time, the DPC signalled to the RSA that the proposed plan of work could be approved from a data protection perspective under certain conditions. These include:

- ▶ strengthening the current regulations in the Road Safety Authority Act to allow for a transfer of personal data, such as names, with approval from An Garda Síochána
- ▶ commissioning an independent third party to conduct the matching

An appropriate third party willing to conduct this work has not yet been identified, and legal advice will be necessary to investigate the proposed amendment to the regulations. Further collaboration with An Garda Síochána and the Health Intelligence Unit (HIU) of the HSE is required to progress with this complex work.

Short-term aim

In the meantime, and in order to comply with the EU requests for the provision of serious injury figures using a medical definition, Ireland has provided the European Commission (EC) with serious injury figures in MAIS3+ format for the period 2005–2014 derived from hospital data only. The work was conducted by the Health Intelligence Unit (HIU) of the HSE on behalf of the RSA, whereby HIPE data for road traffic collisions was translated to a MAIS score. While the first transformation is complete and a provisional set of figures has been sent by the RSA to the EC, further work is required to improve this methodology across the EU. Further refinement of the processes involved in the MAIS transformation is ongoing within the CARE expert group and the HIU (<http://www.safetycube-project.eu/wp-content/uploads/SafetyCube-D7.1-Leaflet.pdf>).

While this complex work is taking place, the RSA and An Garda Síochána continue to use the historic definition of serious injuries:

An injury for which the person is detained in hospital as an 'in-patient' or any of the following injuries whether or not detained in hospital: fractures, concussion, internal injuries, crushing, severe cuts and lacerations, severe general shock requiring medical treatment.

Table 11 shows a comparison of all injury types reported in road traffic collisions on public roads using garda data, as reported to the RSA, and hospital data based on information provided to the RSA by the HIU for the period 2005–2012. An analysis of this data is relevant to inform the discussion on the setting of a revised target for serious injuries.

The hospital (HIPE) data shows:

- ▶ the number of admissions from road traffic collisions that have occurred on public roads involving a hospital stay of 24 hours or more
- ▶ the number of people injured based on MAIS3+ using hospital data only.

Further refinement of the methodology to translate HIPE data to MAIS3+ is required as discussed previously. This is supported by the fact that the analysis below indicates that MAIS3+ data, based on the recent transformation of hospital data, shows a lower level of serious injuries in Ireland compared to the data compiled by the RSA based on garda reports. This is counter-intuitive; the reverse trend is what would be expected. However, a review of the data provided to the RSA by the HIU on hospital stays of 24 hours or more following road traffic collisions has shown a trend that is more in line with what had been anticipated for Ireland, and more in line with trends evident in Europe, namely that the number of serious injuries based on police reports is underestimated. Between 2005 and 2012, the ratio of road traffic collision injuries with a length of stay (LOS) >1 compared to serious injuries is 2.3.

It is important to state that the RSA believes that the optimum method of establishing the true incidence of serious injuries is to statistically match hospital and garda collision data, and this piece of work has not yet been initiated due to the challenges outlined previously. This matching exercise would need to be completed before the RSA would be satisfied to use MAIS to establish a target on serious injuries for 2020.

Table 11 Comparison of numbers with a serious injury in garda and HIPE data

Year	Serious injuries (AGS)	HIPE all RTA-injuries with LOS (length of stay) > 1 day	HIPE MAIS3+ injuries
2005	1,021	1,976	398
2006	907	2,001	439
2007	860	1,880	428
2008	835	1,818	409
2009	640	1,621	403
2010	561	1,410	348
2011	472	1,286	334
2012	474	1,234	346
Total	5,770	13,226	3,105
% change 2005–2012	–53.6%	–37.6%	–13.1%

Table 12 Garda serious injury data 2013–2016

Year	No. of serious injuries (RSA/garda)
2013	508
2014	755*
2015	797†
2016	632†

* From 1 January 2014, the RSA received collision data in an electronic format.

† Provisional data as at Q1 2017, subject to change.

There was a 49% increase in serious injuries in 2014, and this increase has been carried through to 2015 and 2016. It is important to note that there was a change in the way in which the RSA received collision data from 1 January 2014. This involved a move away from a paper-based form sent to the RSA by the gardaí, to a daily electronic transfer of data directly to the RSA, which incorporates a two-way communication system between the RSA and the gardaí to improve the validation process.

The target for serious injuries set out in the strategy (330 or fewer by 2020) was based on an analysis of garda data using the paper-based system of data collection and the historic definition of serious injuries. Given that the way in which the RSA receives garda collision data has now been updated, and also that an increase in serious injuries is evident, a discussion is now warranted as to the appropriateness of continuing to use the 2011 baseline figure of 472.

Alternative options for a revised target on serious injuries could be considered:

- ▶ Develop a target for serious injuries using 2014 garda data as a baseline. This could be done following publication of 2016 serious injury figures, providing three years of data under the new data collection system. This could happen before the end of 2017.
- ▶ Alternatively, length of stay (24 hours+) following a road traffic collision, based on an analysis of hospital data, could serve as a good proxy for a medical definition of serious injuries. Eight years of data is currently available, and this dataset can be updated. A target for 2020 could be set using this data.

In the longer term, MAIS3+ could be used in the development of Irish targets on serious injuries. Even if not used for the purposes of developing targets, it has a value in facilitating comparisons in serious injury reporting across Europe.

In the meantime, it is also relevant to articulate a new action more specifically to describe the work required from 2017 to 2020 to progress the work on serious injury reporting in line with ongoing developments in the European Commission:

Develop and implement protocols with the relevant agencies to statistically match collision data with hospital data in order to produce serious injury figures in MAIS3+ format.

While a number of countries in the EU have made progress in reporting on serious injuries in MAIS3+, most countries have experienced challenges unique to their own country. The RSA believes it is important for Ireland to make progress in this area, and is committed to working with the relevant stakeholders to develop a protocol for conducting the data matching and delivering on the requirements as set out by the European Commission.

Appendix D Section 8, Road Safety Authority Act 2006

8.— (1) The Minister may direct the Authority to collect, compile, prepare, publish or distribute to such persons (including the Minister) such information and statistics relating to road safety and the functions of the Authority, as the Minister considers appropriate, for national or international planning, policy research and development, monitoring and reporting purposes and may specify any matter concerning the collection, compilation, preparation, publication and distribution of such data and statistics, as the Minister considers appropriate.

(2) The Minister shall consult the Authority, and may consult any other person he or she considers appropriate, before issuing a direction under *subsection (1)*.

(3) For the purpose of facilitating the collection of information and statistics under *subsection (1)* the Authority may require a person who holds records relating to road safety or matters relating to the functions of the Authority, to give to the Authority such information and statistics in such form (including electronic form) and at such reasonable times or intervals, as the Authority specifies. A person to whom such a requirement is directed shall comply with the requirement.

<http://www.irishstatutebook.ie/eli/2006/act/14/enacted/en/print#sec8>

Working to Save Lives

Údarás Um Shábháilteacht Ar Bhóithre
Road Safety Authority

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